D1025TM

SERVICE MANUAL

D1025TM

Equator Model
Japan Model
N. Hemisphere Model

Chassis No. SCC-L07D-A

D-1H CHASSIS

SPECIFICATIONS

Picture tube	0.25 mm aperture grill pitch 17 inches measured diagonally 90-degree deflection
Video image area	(16" maximum viewing image) Approx. 329.5 x 243 mm (w/h) (13 x 9 5/8 inches)
Logical resolution	Horizontal: Max. 1280 dots Vertical: Max. 1024 lines
Physical resolution	Horizontal: Max. 1024 dots Vertical: Max. 768 lines
Standard image area	Approx. 312 x 234 mm (w/h) (12 3/8 x 9 1/4 inches)
Input signal	
Video	Analog RGB (75 ohms typical) 0.7 Vp-p, Positive
Sync	External HD/VD, Composite Polarity Free TTL Video Composite (Sync on Green) 0.3 Vp-p, Negative

Power Consumption	
Maximum	120W
Nominal	100W, 341 BTU/h
Deflection frequency	Horizontal: 30 to 85 KHz Vertical: 50 to120 Hz
AC input voltage / current	100 to 120 V, 50/60 Hz, 1.8 A 220 to 240V, 50/60Hz, 1A
Dimensions	406 x 432 x 420 (w/h/d) (16 x 17 1/8 x 16 5/8 inches)
Mass	Approx. 18.0 kg (39 lb 11 oz)

Design and specifications are subject to change without notice.

MICROFILM

COLOR MONITOR

DELL®

POWER SAVING FUNCTION

This monitor has three Power Saving modes.
By sensing the absence of a video signal from the computer, it reduces power consumption as follows:

NOTE: If no video signal is input to the monitor, the "NO INPUT SIGNAL" message appears. After about 30 seconds, the Power Saving function automatically puts the monitor into active-off mode and the indicator lights up orange. Once the monitor detects horizontal and vertical sync signals, the monitor automatically resumes normal operation mode.

	State	Power Consumption	Required Recovery Time	⏻ Power Indicator
1	Normal Operation	≤110W	———	Green on
2	Standby (1st mode)	≤15W	approx. 3 sec.	Green and orange alternate
3	Suspend (2nd mode)	≤15W	approx. 3 sec.	Green and orange alternate
4	Active-off (3rd mode)	≤8W	approx. 10 sec.	Orange
5	Power-off	0W	———	Off
6	Failure mode	———	———	Orange flashing

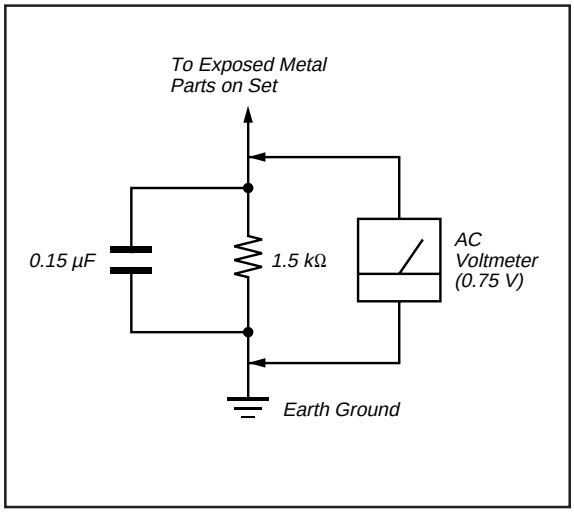
TIMING SPECIFICATION

MODE	1	2	3	4	5	6	7	8	9	10
Resolution (H x V)	640x480	720x400	640x480	800x600	800x600	1024x788	1024x768	1024x768	1280x1024	1280x1024
Dot Clock (MHz)	25.175	28.321	36.000	49.500	56.250	65.000	78.750	94.500	108.000	135.000
HORIZONTAL										
Hor. Freq. (kHz)	31.469	31.468	43.269	46.875	53.674	48.363	60.023	68.677	63.981	79.976
H-Total	31.778	31.779	23.111	21.333	18.631	20.677	16.660	14.561	15.630	12.504
H-Blanking	6.356	6.356	5.333	5.172	4.409	4.923	3.657	3.725	3.778	3.022
H-Front Porch	0.636	0.636	1.556	0.323	0.569	0.369	0.203	0.508	0.444	0.119
H-Sync.	3.813	3.178	1.556	1.616	1.138	2.092	1.219	1.016	1.037	1.067
H-Back Porch	1.907	2.542	2.222	3.232	2.702	2.462	2.235	2.201	2.296	1.837
H-Active(μsec)	25.422	25.423	17.778	16.162	14.222	15.754	13.003	10.836	11.852	9.481
VERTICAL										
Ver. Freq. (Hz)	59.940	70.084	85.008	75.000	85.061	60.004	75.029	84.997	60.020	75.025
V-Total	525	449	509	625	631	806	800	808	1066	1066
V- Blanking	45	49	29	25	31	38	32	40	42	42
V-Front Porch	10	13	1	1	1	3	1	1	1	1
V-Sync.	2	2	3	3	3	6	3	3	3	3
V- Back Porch	33	34	25	21	27	29	28	36	38	38
V-Active (lines)	480	400	480	600	600	768	768	768	1024	1024
SYNC.										
Int(G)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
Ext(H/V)/Polarity	YES -/-	YES -/+	YES -/-	YES +/+	YES +/+	YES -/-	YES +/+	YES +/+	YES +/+	YES +/+
Ext (CS)/Polarity	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
Int/Non Int	Non Int	Non Int	Non Int	Non Int	Non Int	Non Int	Non Int	Non Int	Non Int	Non Int

SAFETY CHECK-OUT

After correcting the original service problem, perform the following safety checks before releasing the set to the customer:

1. Check the area of your repair for unsoldered or poorly-soldered connections. Check the entire board surface for solder splashes and bridges.
2. Check the interboard wiring to ensure that no wires are “pinched” or contact high-wattage resistors.
3. Check that all control knobs, shields, covers, ground straps, and mounting hardware have been replaced. Be absolutely certain that you have replaced all the insulators.
4. Look for unauthorized replacement parts, particularly transistors, that were installed during a previous repair. Point them out to the customer and recommend their replacement.
5. Look for parts which, though functioning, show obvious signs of deterioration. Point them out to the customer and recommend their replacement.
6. Check the line cords for cracks and abrasion. Recommend the replacement of any such line cord to the customer.
7. Check the B+ and HV to see if they are specified values. Make sure your instruments are accurate; be suspicious of your HV meter if sets always have low HV.
8. Check the antenna terminals, metal trim, “metallized" knobs, screws, and all other exposed metal parts for AC Leakage. Check leakage as described below.



LEAKAGE TEST

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5 mA (500 microampere). Leakage current can be measured by any one of three methods.

1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers' instructions to use these instructions.
2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.
3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The "limit" indication is 0.75 V, so analog meters must have an accurate low voltage scale. The Simpson's 250 and Sanwa SH-63Trd are examples of passive VOMs that are suitable. Nearly all battery operated digital multimeters that have a 2V AC range are suitable. (See Fig. A)

WARNING!!

NEVER TURN ON THE POWER IN A CONDITION IN WHICH THE DEGAUSS COIL HAS BEEN REMOVED.

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY SHADING AND MARK ⚠ ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL FOR SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY. CIRCUIT ADJUSTMENTS THAT ARE CRITICAL FOR SAFE OPERATION ARE IDENTIFIED IN THIS MANUAL. FOLLOW THESE PROCEDURES WHENEVER CRITICAL COMPONENTS ARE REPLACED OR IMPROPER OPERATION IS SUSPECTED.

AVERTISSEMENT!!

NE JAMAIS METTRE SOUS TENSION QUAND LA BOBINE DE DEMAGNETISATION EST ENLEVEE.

ATTENTION AUX COMPOSANTS RELATIFS A LA SECURITE!!

LES COMPOSANTS IDENTIFIES PAR UNE TRAME ET PAR UNE MARQUE ⚠ SUR LES SCHEMAS DE PRINCIPE, LES VUES EXPLOSEES ET LES LISTES DE PIECES SONT D'UNE IMPORTANCE CRITIQUE POUR LA SECURITE DU FONCTIONNEMENT. NE LES REMPLACER QUE PAR DES COMPOSANTS SONY DONT LE NUMERO DE PIECE EST INDIQUE DANS LE PRESENT MANUEL OU DANS DES SUPPLEMENTS PUBLIES PAR SONY. LES REGLAGES DE CIRCUIT DONT L'IMPORTANCE EST CRITIQUE POUR LA SECURITE DU FONCTIONNEMENT SONT IDENTIFIES DANS LE PRESENT MANUEL. SUIVRE CES PROCEDURES LORS DE CHAQUE REMPLACEMENT DE COMPOSANTS CRITIQUES, OU LORSQU'UN MAUVAIS FONTIONNEMENT SUSPECTE.

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GENERAL

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Precautions

Installation

- Prevent internal heat build up by allowing adequate air circulation. Do not place the monitor on surfaces (rugs, blankets, etc.) or near materials (curtains, draperies) that may block the ventilation holes.
- Do not install the monitor near heat sources such as radiators or air ducts, or in a place subject to direct sunlight, excessive dust, mechanical vibration or shock.
- Do not place the monitor near equipment that generates magnetism, such as a converter, or high voltage power lines.

Maintenance

- Clean the cabinet, panel and controls with a soft cloth lightly moistened with a mild detergent solution. Do not use any type of abrasive pad, scouring powder or solvent such as alcohol or benzine.
- Do not rub, touch or tap the surface of the screen with sharp or abrasive items such as a ball point pen or screwdriver. This type of contact may scratch the picture tube.

Warning on Power Connection

- Use an appropriate power cord for your local power supply.

  For customers in the U.S.A.

  If you do not use an appropriate power cord, the monitor will not conform to mandatory FCC standards.

Examples of plug types:

for 100 to 120 V AC **for 220 to 240 V AC** **for 240 V AC only**

- Before disconnecting the power cord, wait for at least 30 seconds after turning off the power to allow the static electricity on the CRT display surface to discharge.
- After the power has been turned on, the CRT is demagnetized (degaussed) for about 5 seconds. This generates a strong magnetic field around the metal frame, which may affect the data stored on magnetic tapes and disks near the monitor. Place magnetic recording equipment, tapes and disks away from this monitor.

The socket should be installed near the equipment and be easily accessible.

Plug and Play

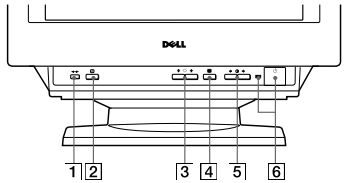
This monitor complies with the DDC™1 and DDC2B Display Data Channel (DDC) standards of VESA.
When a DDC1 host system is connected, the monitor synchronizes with the V. CLK in accordance with the VESA standards, and outputs the EDID (Extended Display Identification Data) to the data line.
When a DDC2B host system is connected, the monitor automatically switches to the appropriate standard.

DDC™ is a trademark of Video Electronics Standard Association.

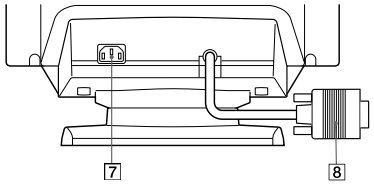
- Your monitor operates according to DDC2B. Only computers that support the same guidelines and operate at the same or higher level can make use of this feature.
- If your computer does not support the relevant guidelines, you can still use your monitor and computer. You may need to manually specify the appropriate resolution in the computer.
- The highest resolution automatically selected may not give the best result. You may need to manually select the most suitable resolution in the computer.

Parts and Controls

Front



Rear



1 →•← **(RESET) button (pages 6 and 9)**
Resets the adjustments to the factory settings.

2 **(GEM) button (page 10)**
Selects the Graphic Enhancement Mode.

3 **(BRIGHTNESS) ↓/↑ buttons (page 6)**
Adjust the picture brightness.
Operate as the ↓/↑ buttons when adjusting other items.

4 **(MENU) button (pages 6 and 11)**
Displays the MENU OSD.

5 **(CONTRAST) ←/→ buttons (page 6)**
Adjust the contrast.
Operate as the ←/→ buttons when adjusting other items.

6 **(POWER) switch and indicator (page 11)**
Turns the monitor on and off.
The indicator lights up green when the monitor is on, and lights up orange when the monitor is in Power Saving mode.

7 **AC IN connector**
Provides AC power to the monitor.

8 **Video input connector (HD15)**
Inputs RGB video signals and SYNC signals

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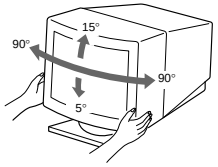
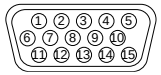
Use of the Tilt/Swivel

With the tilt/swivel, you can adjust this monitor to any desired angle within 180° horizontally and 20° vertically.
To turn the monitor vertically and horizontally, hold it at the bottom with both hands as shown below.



Video Connector

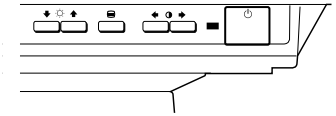


Pin No.	Signal	Pin No.	Signal
1	Red	8	Blue Ground
2	Green (Composite Sync on Green)	9	Not used (no pin)
		10	Ground
3	Blue	11	Ground
4	Ground	12	SDA (serial data)
5	CPU Sense	13	Horizontal Sync
6	Red Ground	14	Vertical Sync
7	Green Ground	15	SCL (serial clock)

Adjusting the Picture Brightness and Contrast

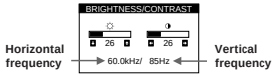
1 **Press the ☼ (BRIGHTNESS) 🡻/🡹 or ◑ (CONTRAST) 🡸/🡺 buttons.**

The BRIGHTNESS / CONTRAST OSD appears.



2 **To adjust the brightness**
Press the ☼ (BRIGHTNESS) 🡻/🡹 buttons.

To adjust the contrast
Press the ◑ (CONTRAST) 🡸/🡺 buttons.



The OSD (On-screen Display) System

Introducing the OSD System

You can adjust most of the monitor's settings using the OSDs (On-screen Display). All of the OSDs numbered in this illustration are described on the following pages in order. You can access any of these OSDs from the MENU OSD. To adjust monitor settings using the OSDs, follow the steps below:

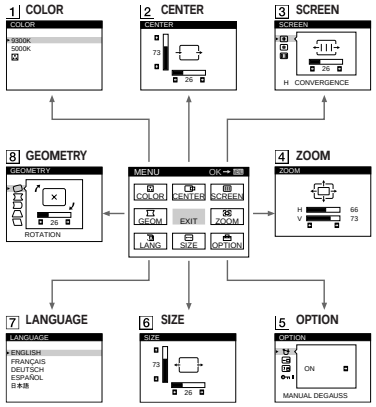
Basic controls:

- Use the ▬ (MENU) button to display the MENU OSD and to select menu items.
- Use the ☼ (BRIGHTNESS) 🡻/🡹 and ◑ (CONTRAST) 🡸/🡺 buttons to highlight menu items and to adjust settings.

To adjust the monitor settings:

1 Press the MENU button to display the MENU OSD.
2 Highlight the desired OSD using the BRIGHTNESS and CONTRAST buttons and press the MENU button again.
3 If necessary, use the BRIGHTNESS buttons to select a specific item.
4 Adjust the monitor setting using the BRIGHTNESS and CONTRAST buttons.
- To reset the current item to its original setting, press the →•← (RESET) button while the item's adjustment OSD is displayed.

5 When you finish adjusting the setting, press the MENU button to return to the MENU OSD.
Press the MENU button twice to return to normal viewing.
- Resetting: If you press the RESET button while an OSD is displayed, only the current adjustment item is reset. For additional information on using the reset function, see the "Resetting the Adjustments" section on page 9.
- The OSD automatically disappears after 30 seconds.



Adjusting the Settings

1 Using the COLOR OSD

You can adjust the monitor's color temperature using the COLOR OSD. For example, you can adjust the monitor to match the colors of a printed picture.
You can adjust the color temperature from 9300K (blue-white) to 5000K (warm red).
This setting is stored in memory for all input signals.

1 Press the MENU button to display the MENU OSD.
2 Highlight the COLOR OSD using the BRIGHTNESS and CONTRAST buttons and press the MENU button again.
3 Press the ☼ (BRIGHTNESS) 🡻/🡹 buttons to select either the 9300K, 5000K or variable ⚄ option.
- The 9300K and 5000K options display accurate preset color temperatures.
- The variable ⚄ option allows you to adjust the monitor using the full range of color temperatures. Adjust to the desired color temperature using the BRIGHTNESS and CONTRAST buttons.

4 Press the MENU button once to return to the MENU OSD, or press it twice to return to normal viewing.

Note
If you are using one of the GEMs (Graphic Enhancement Mode), you can only adjust the color temperature from 11,000K to 9300K.
For more information on GEMs refer to the "Graphic Enhancement Mode (GEM)" section on page 10.

2 Using the CENTER OSD

You can adjust the picture centering using the CENTER OSD.
This setting is stored in memory for the current input signal.

1 Press the MENU button to display the MENU OSD.
2 Highlight the CENTER OSD using the BRIGHTNESS and CONTRAST buttons and press the MENU button again.
3 To adjust vertical centering, press the ☼ (BRIGHTNESS) 🡻/🡹 buttons.
4 To adjust horizontal centering, press the ◑ (CONTRAST) 🡸/🡺 buttons.
5 Press the MENU button once to return to the MENU OSD, or press it twice to return to normal viewing.

3 Using the SCREEN OSD

You can adjust the convergence of the picture and cancel the picture's moire using the SCREEN OSD.
Convergence is the alignment of the Red, Green and Blue electron beams on the screen. When convergence is not aligned, red or blue shadows may be noticeable (especially with text) which can affect the clarity or focus of the image.
Moire is a wavy or elliptical pattern which may appear on the screen. The moire cancel adjustment is provided to eliminate moire.
This setting is stored in memory for all input signals.

1 Press the MENU button to display the MENU OSD.
2 Highlight the SCREEN OSD using the BRIGHTNESS and CONTRAST buttons and press the MENU button again.
3 Press the ☼ (BRIGHTNESS) 🡻/🡹 buttons to select the desired adjustment item.
4 Press the ◑ (CONTRAST) 🡸/🡺 buttons to adjust the item.
5 Press the MENU button once to return to the MENU OSD, or press it twice to return to normal viewing.

Select	To
H CONVERGENCE	adjust the horizontal convergence
V CONVERGENCE	adjust the vertical convergence
CANCEL MOIRE	eliminate elliptical or wavy lines on the screen
MOIRE ADJUST *	adjust the degree of moire cancellation

* CANCEL MOIRE must be "ON" for " (MOIRE ADJUST)" to appear on the screen.

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4 Using the ZOOM OSD

You can enlarge or reduce the picture size using the ZOOM OSD.
This setting is stored in memory for the current input signal.

1 Press the MENU button to display the MENU OSD.
2 Highlight the ZOOM OSD using the BRIGHTNESS and CONTRAST buttons and press the MENU button again.
3 Press the ◑ (CONTRAST) ⬅ / ➡ buttons to enlarge or reduce the picture size.
4 Press the MENU button once to return to the MENU OSD, or press it twice to return to normal viewing.

Note
You can enlarge or reduce the picture size until either the horizontal or vertical size reaches its maximum or minimum value.

5 Using the OPTION OSD

You can manually degauss (demagnetize) the CRT, move the OSD position and lock the user controls using the OPTION OSD.

1 Press the MENU button to display the MENU OSD.
2 Highlight the OPTION OSD using the BRIGHTNESS and CONTRAST buttons and press the MENU button again.
3 Press the ☼ (BRIGHTNESS) ⬇ / ⬆ buttons to select the desired adjustment item.
4 Press the ◑ (CONTRAST) ⬅ / ➡ buttons to activate the manual degauss, move the OSD position or lock the user controls.
5 Press the MENU button once to return to the MENU OSD, or press it twice to return to normal viewing.

Degauss: If a second degauss cycle is needed, allow a minimum interval of 20 minutes for the best result.

OSD Position Change: To change the OSD position, press the ☼ (BRIGHTNESS) ⬇ / ⬆ buttons to select the direction (horizontal or vertical), then press the ◑ (CONTRAST) ⬅ / ➡ buttons to move the OSD in the selected direction.

User Control Lock: Once you select "ON" to lock the user controls, you cannot select any item except "EXIT" and "OPTION" in the MENU OSD. If you try to access any other OSD, the 🔑 mark appears on the screen.

To cancel the Control Lock: Repeat the above procedure and set Control Lock to "OFF."

6 Using the SIZE OSD

You can adjust the picture size using the SIZE OSD.
This setting is stored in memory for the current input signal.

1 Press the MENU button to display the MENU OSD.
2 Highlight the SIZE OSD using the BRIGHTNESS and CONTRAST buttons and press the MENU button again.
3 To adjust the vertical size press the ☼ (BRIGHTNESS) ⬇ / ⬆ buttons.
4 To adjust the horizontal size press the ◑ (CONTRAST) ⬅ / ➡ buttons.
5 Press the MENU button once to return to the MENU OSD, or press it twice to return to normal viewing.

7 Using the LANGUAGE OSD

You can set the OSD language to English, German, French, Spanish or Japanese using the LANGUAGE OSD.
To reset to English, press the RESET button while the LANGUAGE OSD is displayed.

1 Press the MENU button to display the MENU OSD.
2 Highlight the LANGUAGE OSD using the BRIGHTNESS and CONTRAST buttons and press the MENU button again.
3 Press the ☼ (BRIGHTNESS) ⬇ / ⬆ buttons to select the desired language.
4 Press the MENU button once to return to the MENU OSD, or press it twice to return to normal viewing.

8 Using the GEOMETRY OSD

You can adjust the picture's geometry using the GEOMETRY OSD.
This setting is stored in memory for the current input signal.

1 Press the MENU button to display the MENU OSD.
2 Highlight the GEOMETRY OSD using the BRIGHTNESS and CONTRAST buttons and press the MENU button again.
3 Press the ☼ (BRIGHTNESS) ⬇ / ⬆ buttons to select the desired geometry adjustment.
4 Press the ◑ (CONTRAST) ⬅ / ➡ buttons to adjust the geometry.
5 Press the MENU button once to return to the MENU OSD, or press it twice to return to normal viewing.

Select		To
⬭	ROTATION	adjust the picture rotation
⧗	PINCUSHION	adjust the picture sides
⧐	PIN BALANCE	adjust the picture side balance
⏢	KEYSTONE	adjust the trapezoidal distortion
⏥	KEY BALANCE	adjust the picture shape balance

Resetting the Adjustments

Resetting a specific adjustment:

1 Press the MENU button to display the MENU OSD
2 Highlight the OSD containing the adjustment you want to reset using the BRIGHTNESS and CONTRAST buttons and press the MENU button again.
3 Press the ☼ (BRIGHTNESS) ⬇ / ⬆ buttons to select the adjustment you want to reset.
4 Press the →•← (RESET) button to reset this specific adjustment.

Resetting all of the adjustments for the current input signal

While there is no OSD displayed, press the →•← (RESET) button.
All of the adjustments for the current input signal are reset to the factory settings.
Adjustments not affected by changes in the input signal (such as OSD language, OSD position and the Control Lock function) are not reset to the factory settings.

Resetting all of the adjustments for all input signals

Press and hold the →•← (RESET) button for more than two seconds.
All of the adjustments, including the brightness and contrast, are reset to the factory settings.

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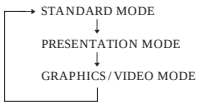
Graphic Enhancement Mode (GEM)

You can automatically change the characteristics of the picture to match the way you use your monitor with the Graphic Enhancement Mode (GEM). Simply press the (GEM) button to cycle through the three modes.

1 **Turn on the monitor and computer.**

2 **Press the (GEM) button to set the mode.**

Each time you press the (GEM) button, the mode changes and appears on the screen as follows.



The STANDARD MODE is ideal for spreadsheets, word processing, and other text oriented applications.

The PRESENTATION MODE is useful for presentation programs that require vivid colors.

The GRAPHICS / VIDEO MODE gives movies and games enhanced visual appeal by increasing the sharpness and brightness.

The selected mode indication appears on the screen for about three seconds.

If the screen appears too white, adjust the color temperature (see "Using the COLOR OSD" on page 7).

Note

The PRESENTATION MODE and GRAPHICS / VIDEO MODE may produce ghost images when displaying text oriented applications. These modes change the brightness of the picture dynamically according to changes in moving pictures. If ghost images appear, set the GEM to STANDARD MODE.

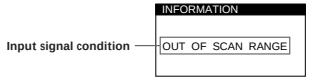
Warning Messages

If there is something wrong with the input signal, one of the following messages appears.

The input signal condition

"OUT OF SCAN RANGE" indicates that the input signal is not supported by the monitor's specifications.

"NO INPUT SIGNAL" indicates that no signal is input. The message disappears after about 30 seconds.



To solve these problems, see the "Troubleshooting" section below.

Troubleshooting

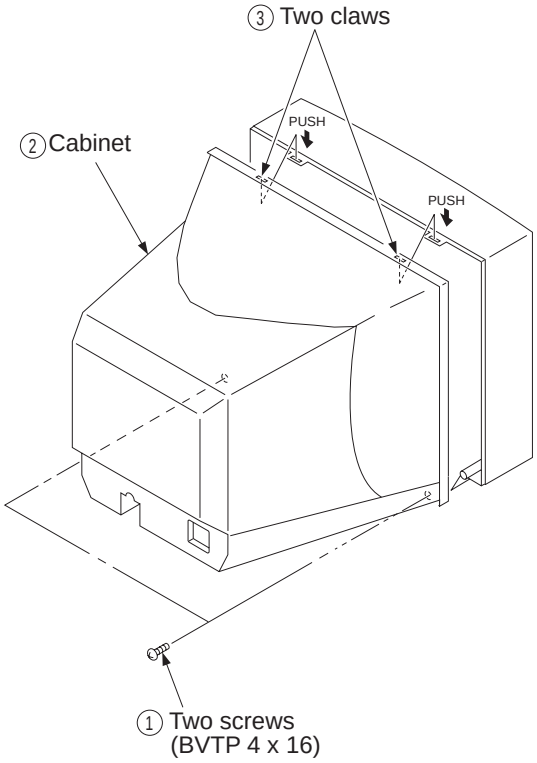
This section may help you isolate the cause of a problem and as a result, eliminate the need to contact technical support.

Symptom	Check these items
No picture	
If the ⏻ indicator is not lit	• Make sure the power cord is properly connected. • Make sure the ⏻ (POWER) switch is in the "ON" position.
If the "NO INPUT SIGNAL" message appears on the screen, or if the ⏻ indicator is either orange or alternating between green and orange	• Try pressing any key on the computer keyboard. • Make sure your computer is turned on. • Make sure the video signal cable is properly connected and all plugs are firmly seated in their sockets. • Make sure none of the HD15 video input connector pins are bent or pushed in. • Make sure the video board is completely seated in the proper bus slot.
If the "OUT OF SCAN RANGE" message appears on the screen	• Make sure the video frequency range is within that specified for the monitor. Horizontal: 30 – 70 kHz Vertical: 50 – 120 Hz Refer to your computer system's instruction manual to adjust the video frequency range. • If you are using a video signal cable adapter, make sure it is the correct type.
If no message is displayed and the ⏻ indicator is green or flashing orange	• Run the SELF TEST function: 1. Turn off the monitor and disconnect the video cable from the computer. 2. Turn on the monitor and wait five seconds. The "NO INPUT SIGNAL" message should appear with a color bar pattern. The message and pattern are displayed for 30 seconds. If the monitor displays White, Red, Green and Blue colors, the monitor is functioning properly. • Make sure none of the HD15 video input connector pins are bent or pushed in.
Picture is scrambled	• Check your video board manual for the proper monitor setting. • Check this manual and make sure the monitor supports the graphics mode and the frequency at which you are trying to operate. Even if the frequency is within the proper range, some video boards may have a sync pulse that is too narrow for the monitor to sync correctly.
Color is not uniform	• Degauss the monitor (page 8). If you place equipment which generates a magnetic field, such as a loudspeaker, near the monitor, or you change the direction of the monitor, the color may not be uniform. The degauss function demagnetizes the metal frame of the CRT to obtain a neutral field for uniform color reproduction. If a second degauss cycle is needed, allow a minimum interval of 20 minutes for the best result.

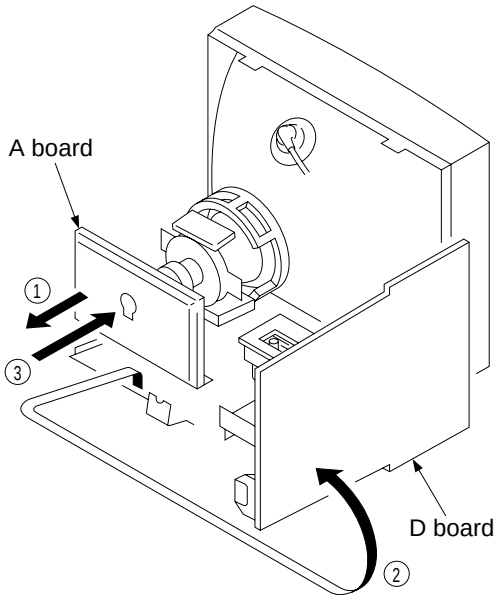
Symptom	Check these items
You cannot adjust the monitor with the buttons on the front panel	• If the Control Lock function is set to "ON," set it to "OFF" using the OPTION OSD (page 8).
Screen image is not centered or sized properly	• Adjust the size (page 8) or centering (page 7). • Some video modes do not fill the screen to the edges. This problem tends to occur with certain video boards.
Edges of the image are curved	• Adjust the geometry (page 9).
White lines show red or blue shadows at edges	• Adjust the convergence using the SCREEN OSD (page 7).
Picture is fuzzy	• Adjust the contrast and brightness (page 6). • Degauss the monitor using the OPTION OSD (page 8). If you place equipment which generates a magnetic field, such as a loudspeaker, near the monitor, or you change the direction of the monitor, the color may not be uniform. The degauss function demagnetizes the metal frame of the CRT to obtain a neutral field for uniform color reproduction. If a second degauss cycle is needed, allow a minimum interval of 20 minutes for the best result. • If red or blue shadows appear along the edges of images, adjust the convergence using the SCREEN OSD (page 7). • If the moire is cancelled, the picture may become fuzzy. Decrease the moire cancellation effect using the SCREEN OSD (page 7).
Picture bounces or has wavy oscillations	• Isolate and eliminate any potential sources of electric or magnetic fields. Common causes for this symptom are electric fans, fluorescent lighting and laser printers. • If you have another monitor close to this monitor, increase the distance between them to reduce the interference. • Try plugging the monitor into a different AC outlet, preferably on a different circuit. • Try using the monitor with a different computer in a different room.
Picture is flickering	• Refer to your computer system's manual and change your display refresh rate settings so they match the monitor's capabilities.
Picture appears to be ghosting	• Eliminate the use of video cable extensions and / or video switch boxes. Excessive cable length or a weak connection can produce this symptom.
Wavy or elliptical (moire) pattern is visible	• Cancel the moire using the SCREEN OSD (page 7). The moire may be modified depending on the connected computer. • Due to the relationship between resolution, monitor dot pitch and the pitch of some image patterns, certain screen backgrounds sometimes show moire. Change your desktop pattern.
One fine horizontal line (wire) is visible	• This wire stabilizes the vertically striped aperture grille (page 3). This aperture grille allows more light to pass through to the screen giving the Trinitron CRT more color and brightness.
Hum is heard right after the power is turned on	• When the power is turned on, the auto-degauss cycle is activated. While the auto-degauss cycle is activated, a hum may be heard. The same hum is heard when the monitor is manually degaussed. This is not a malfunction.
White does not look white	• Adjust the color temperature using the COLOR OSD (page 7).

SECTION 2
DISASSEMBLY

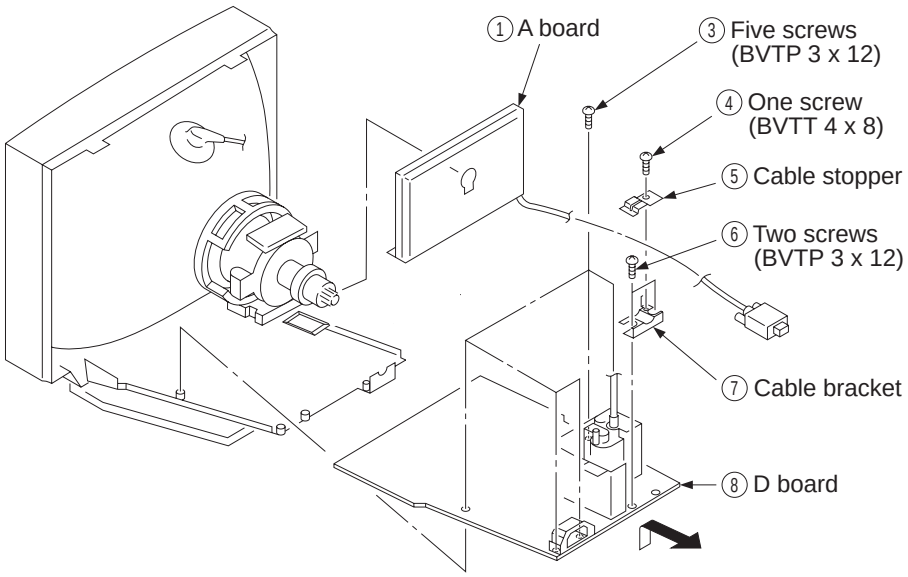
2-1. CABINET REMOVAL



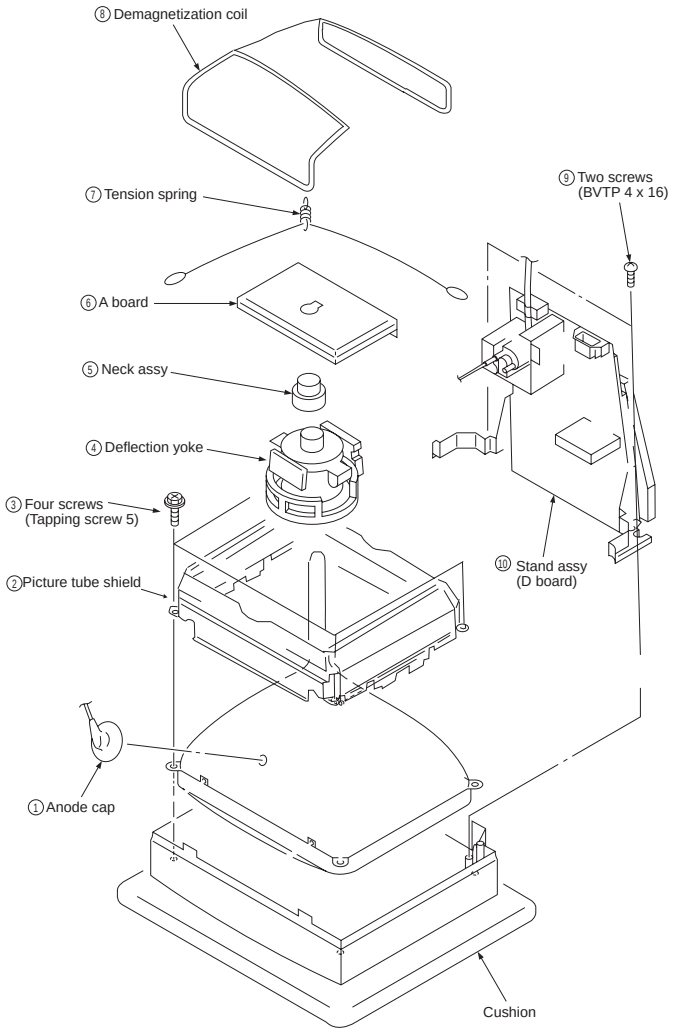
2-2. SERVICE POSITION



2-3. D and A BOARD REMOVAL



2-4. PICTURE TUBE REMOVAL

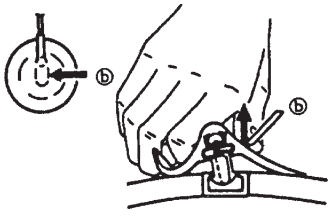


REMOVAL OF THE ANODE-CAP

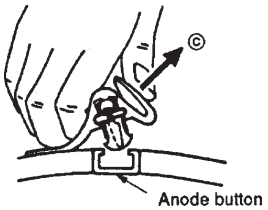
NOTE: Short circuit the anode of the picture tube and the anode cap to the metal chassis, CRT shield or carbon painted on the CRT, after removing the anode.

REMOVAL PROCEDURES

① Turn up one side of the rubber cap in the direction indicated by arrow ⓐ.



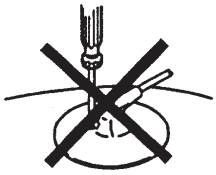
② Use your thumb to pull the rubber cap firmly in the direction indicated by arrow ⓑ.

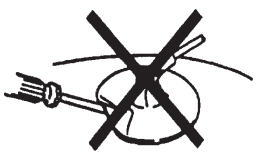


③ When one side of the rubber cap separates from the anode button, the anode-cap can be removed by turning the rubber cap and pulling it in the direction of arrow ⓒ.

HOW TO HANDLE AN ANODE-CAP

① Do not use sharp objects which may cause damage to the surface of the anode-cap.
② Do not squeeze the rubber covering too hard to avoid damaging the anode-cap. A material fitting called a shatter-hook terminal is built into the rubber.
③ Do not force turn the foot of the rubber cover. This may cause the shatter-hook terminal to protrude and damage the rubber.





SECTION 3
SAFETY RELATED ADJUSTMENT

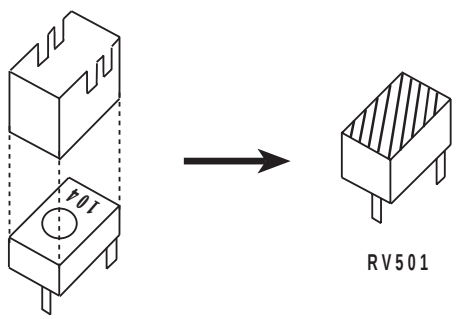
● **When replacing parts shown in the table below, the following operational checks must be performed as a safety precaution against X-ray emissions from the unit.**

D - BOARD
Part Replaced (⋈)
RV501
Part Replaced (◪)
RV501, T501, R545, R546, R548, R550, R547, R549, R552, D517, IC605, IC901, C540, C542, C544, C541, C535, IC501, C558, R567, R564, C555, C553, C554, C561

※ Allow the unit to warm up for one minute prior to checking the following conditions:

a) HV Regulator Check

1) Input white cross hatch signal. (fH = 64 kHz)
2) Minimum CONT and BRT controls.
3) Cut off Screen VR (G2).
4) Input voltage: 120 + 2 VAC
5) Confirm that the voltage is within the voltage range shown below.
   Standard voltage: 25.0KV + 0.5KV
6) When replacing components identified by ◪, make sure to recheck the High Voltage.
7) Verify the High Voltage as shown above (25.0KV + 0.5KV) is within specification. If not, set H. SIZE data at minimum (-127) and then adjust RV501 on "D" Board.
8) After adjusting the High Voltage within specification, put the RV cover on RV501 as shown below and apply sufficient amount of RTV around RV501.



b) HV Hold-Down Check

1) Using an external DC Power supply, apply the voltage shown below between cathode of D517 on "D" Board and GND, and confirm that the HV Hold-Down circuit works. (Raster disappears)
   Apply DC Voltage: 31.4 + 0.01 VDC

Check Condition

- Input voltage : 120 + 2 VAC
- Input signal : (fH = 64 kHz), White Cross Hatch
- Controls : CONT (max) & BRT (center)
- B+ Voltage : 185 + 3.0 VDC

c) Beam Protector Check (Software logic)

1) Using an external DC power supply, apply the voltage 8.8 + 0.01 VDC between pin (11) of FBT (T501) and GND, and confirm that the voltage across C541 is 3.7 VDC or less.

Check Condition

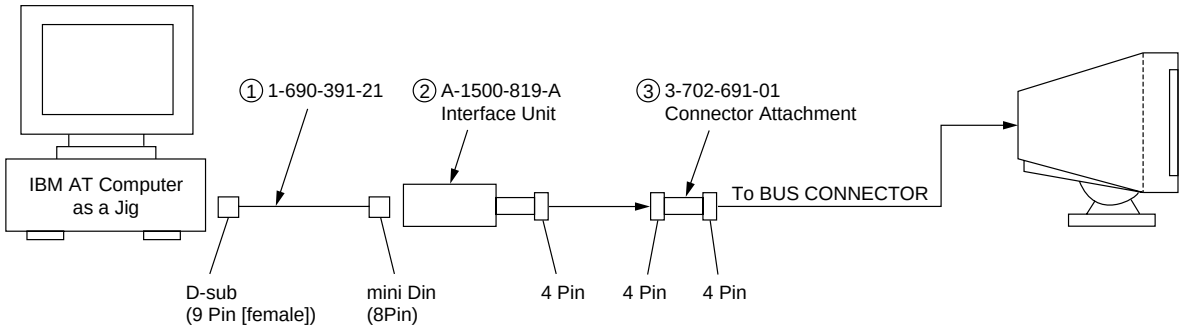
- Input voltage : 120 + 2 VAC
- Input signal : (fH = 64 kHz), White Cross Hatch
- Controls : CONT (max) & BRT (center)

d) B+ MAX. Check

1) Input white cross hatch (fH = 64 kHz) signal.
2) CONT (max) & BRT (center)
3) Input voltage: 120 + 2 VAC
   Note: Use NF power supply or make sure that distortion factor is 3% or less.
4) Confirm that the voltage is within the voltage range shown below.
   Standard voltage: 185 + 3.0 VDC

SECTION 4
ADJUSTMENTS

Connect the communication cable of the connector located on the D board on the monitor. Run the service software and then follow the instructions.



*The parts above (①~③) are necessary for DAS adjustment.

※ Allow a 30 minute warm-up period prior to making the following adjustments:

● Landing Rough Adjustment

1. Enter the full white signal.
2. Adjust the contrast to the maximum.
3. Input full green signal.
4. Moving the DY backward, and adjust coarsely the purity magnet sothat a green raster positions in the center of screen.
5. Moving the DY forward, adjust so that an entire screen becomes pure green.
6. Adjust the tilt of DY, and tighten lightly with a clamp.

● Landing Fine Adjustment

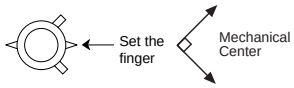
1. Place the set in the Helmholtz coil.
2. Enter a green signal only.
3. Degauss the entire screen with hand-degausser. Then auto-degauss it.
4. Attach a wobbling coil to the specified position of CRT neck.
5. Attach a landing adjuster sensor on the CRT.
6. Using a landing checker, adjust the DY position, purity, tilt of DY.
7. Clamp the DY screw.
   Clamping torque: 22 + 2 kgcm (2.2+ 0.2 N.m)

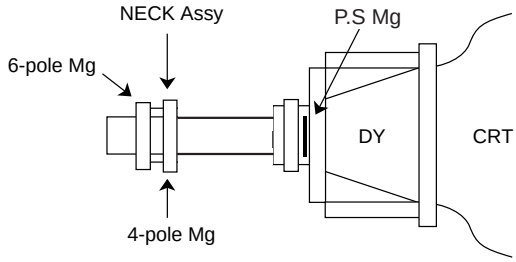
● Convergence Rough Adjustment

1. All digital convergence data should be zero by MCP.
2. Enter the white crosshatch signal.
3. Adjust roughly the horizontal and vertical convergence at four-pole magnet.
4. Adjust roughly HMC and VMC at six-pole magnet.

● Convergence Fine Adjustment

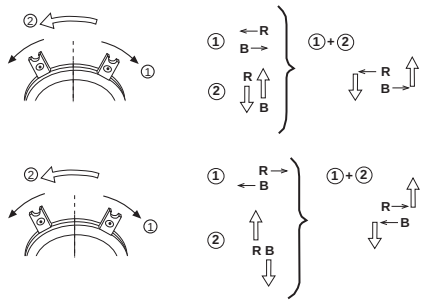
Set DY four-pole magnet to mechanical center before adjustment.
This should be prime mode.





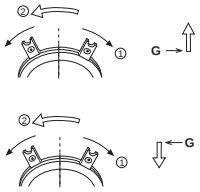
1. Receive R.B. cross-hatch.
2 Adjust H.STAT and V.STAT at four-pole magnet.

Four-Pole Magnet



3. Receive White cross-hatch.
4. Adjust HMC and VMC at six-pole magnet.

Six-Pole Magnet

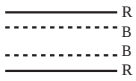


5. Receive R.B. cross-hatch.
6. Adjust H.TILT by swinging the DY neck right and left.
7. Adjust XCV with XCV core.

XCV movement

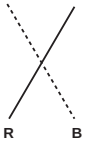
8. Adjust V.TILT with TLV VR.

TLV movement



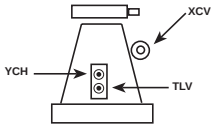
9. Adjust Y.CROSS with YCH VR.

YCH movement



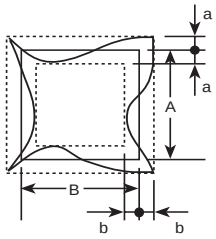
10. Paint lock the four-pole and six-pole magnet.

VR Adjustment on DY



Zero Position NECK Ass'y

● Vertical and Horizontal Position and Size Specification

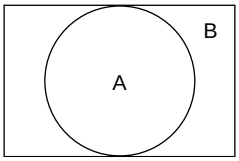


a < 2.5 mm
b < 2.5 mm

A	B
202	270

● Convergence Specification

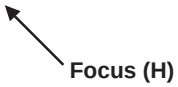
Horizontal and Vertical



A ≦ **0.30mm**
B ≦ **0.30mm**

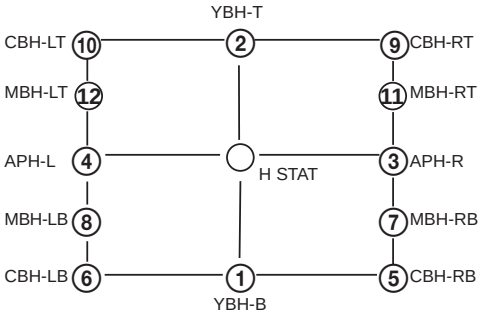
● Focus adjustment

Adjust focus (V) and focus (H) for optimum focus.



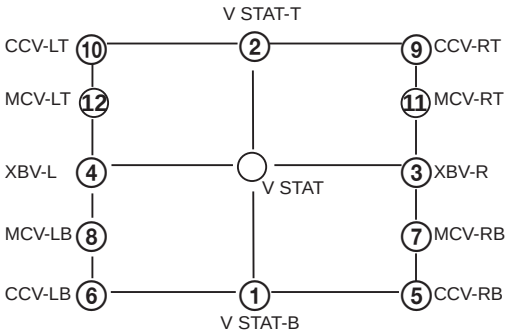
11. Digital Convergence Adjustment

A. Horizontal Convergence



Adjust each misconvergence point in sequence.

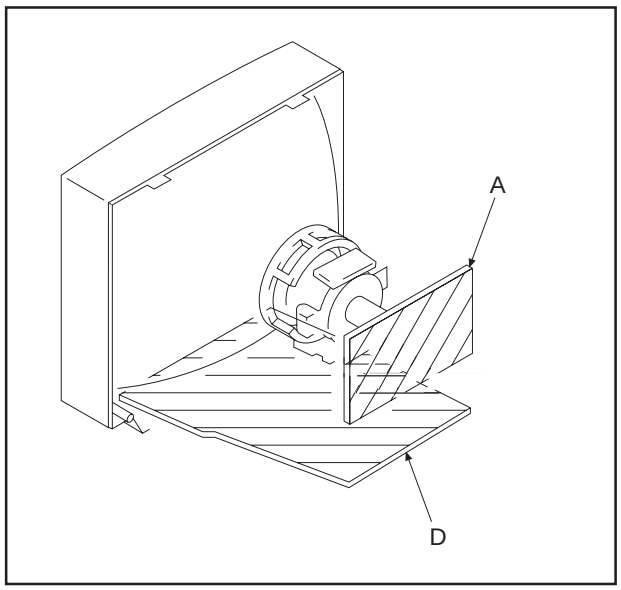
B. Vertical Convergence



Adjust each misconvergence point in sequence.

C. Repeat the procedure of A and B so that the convergence of the whole screen is within the specification.

5-2. CIRCUIT BOARDS LOCATION



5-3. SCHEMATIC DIAGRAMS AND PRINTED WIRING BOARDS

Note:

- All capacitors are in µF unless otherwise noted. pF: µµF 50 WV or less are not indicated except for electrolytic.
- Indication of resistance, which does not have one for rating electrical power, is as follows.

  Pitch: 5 mm
  Rating electrical power 1/4 W (CHIP: 1/10 W)

- All resistors are in ohms.
- : nonflammable resistor.
- : fusible resistor.
- Δ : internal component.
- : panel designation and adjustment for repair.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
- ⊥ : earth-ground.
- ⏚ : earth-chassis.
- The components identified by ⋈ in this basic schematic diagram have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation. Should replacement be required, replace only with the value originally used.
- When replacing components identified by ◪, make the necessary adjustments by using RV501 (⋈) as indicated. (See page 12)

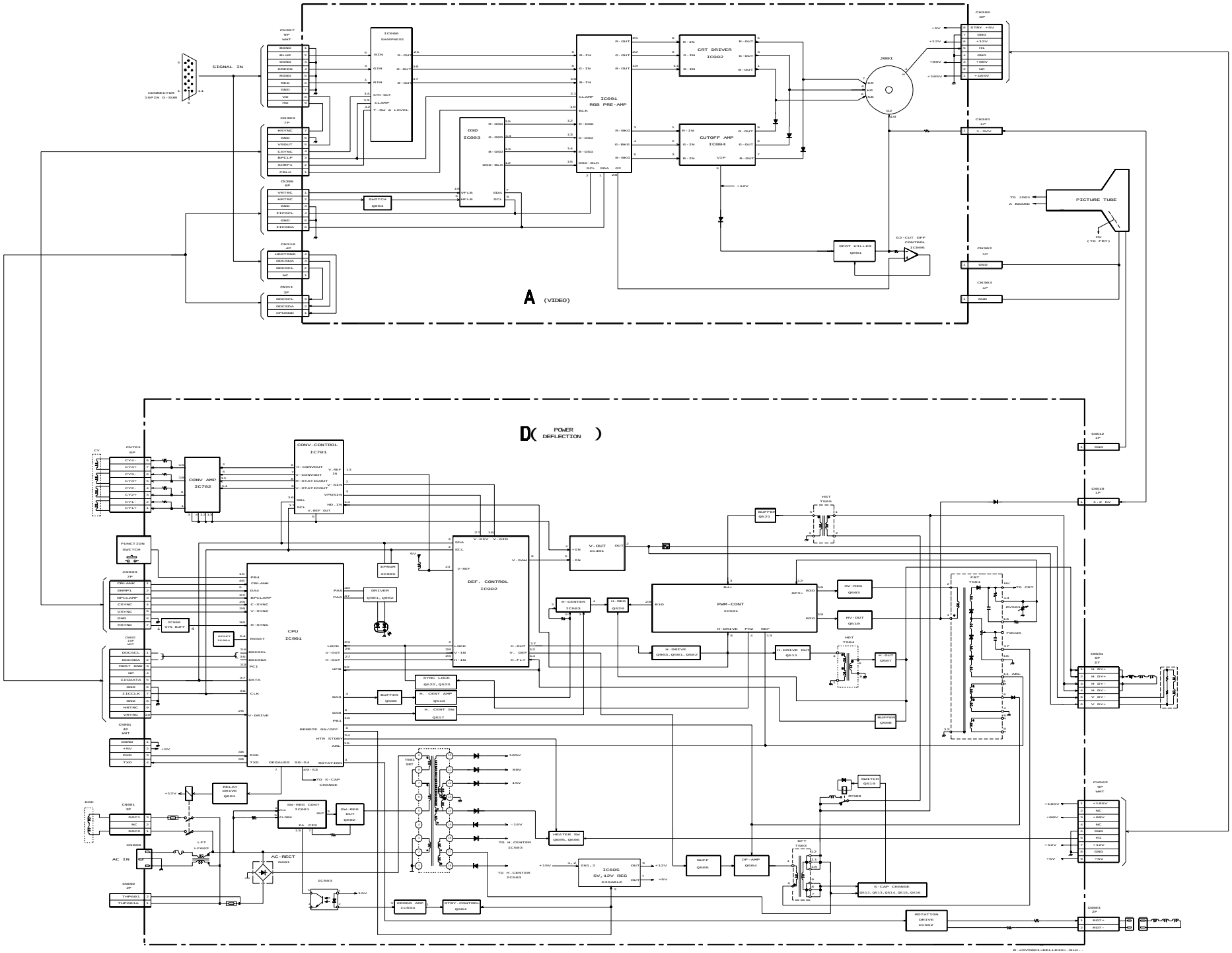
Note: The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

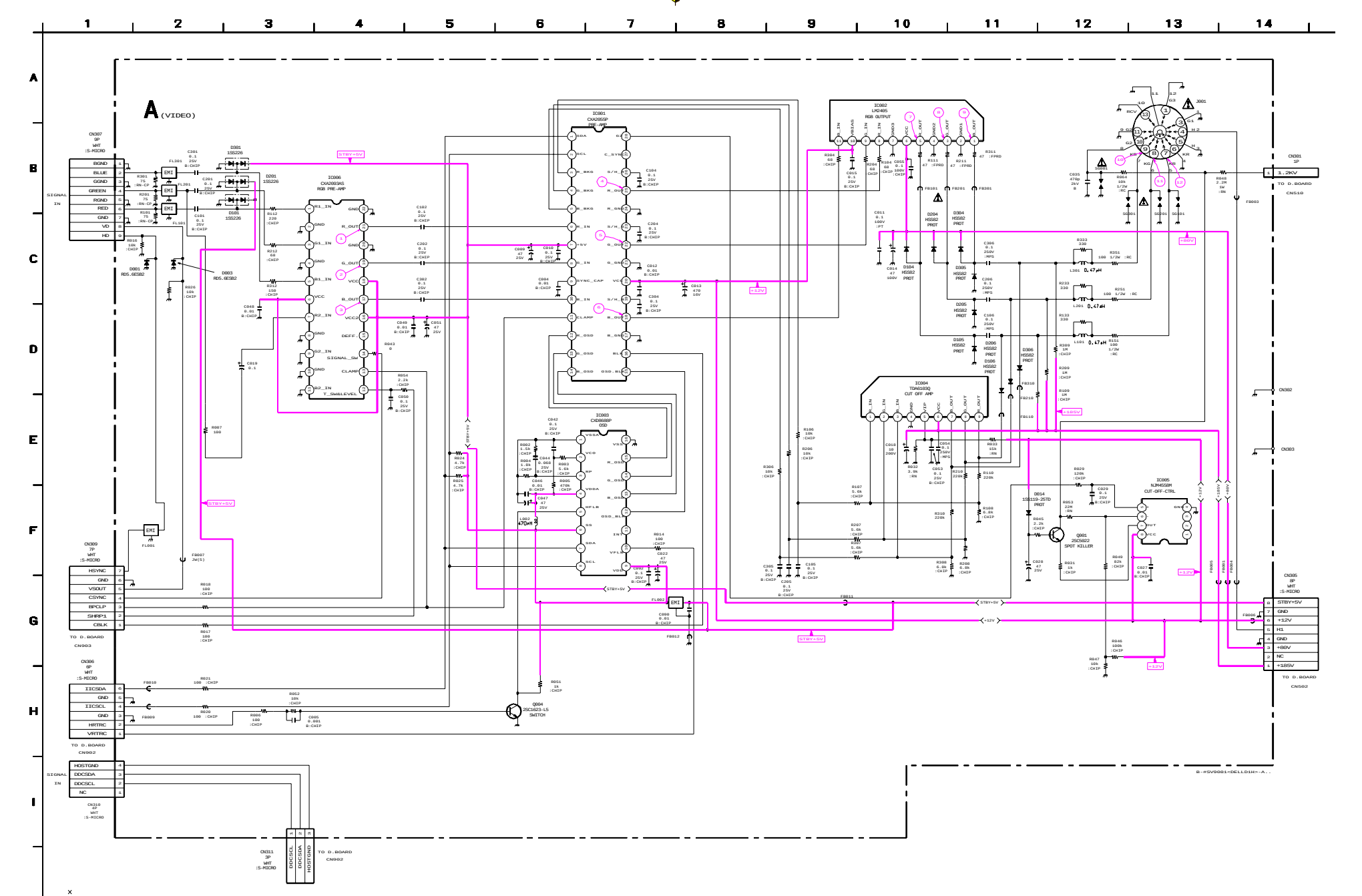
Note: Les composants identifies per un trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

- When replacing parts shown in the table below, be sure to perform the safety related adjustment.

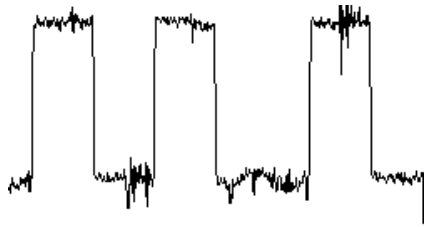
D - BOARD
Part Replaced (⋈)
RV501
Part Replaced (◪)
RV501, T501, R545, R546, R548, R550, R547, R549, R552, D517, IC605, IC901, C540, C542, C544, C541, C535, IC501, C558, R567, R564, C555, C553, C554, C561

- All voltages are in volts.
- Readings are taken with a 10 MΩ digital multimeter
- Readings are taken with a color-bar signal input.
- Voltage variations may be noted due to normal production tolerances.
- * : Cannot be measured.
- Circled numbers are waveform references.
- ——— : B +bus.
- – – – : B - bus.


SIGNAL IN
CONNECTOR 15PIN D-SUB
CN397 9P WHT
CN399 7P
CN388 8P
CN316 4P
CN311 3P
IC690 SHARPNESS
OSD IC693
IC691 RGB PRE-AMP
CRT DRIVER IC692
CUTOFF AMP IC694
SWITCH Q694
J001
CN386 8P
CN381 1P 1.3KV
CN382 1P GND
CN383 1P GND
TO J001 A BOARD
PICTURE TUBE
HV (TO FBT)
SPOT KILLER Q691
G2-CUT OFF CONTROL IC695
A (VIDEO)
D(POWER DEFLECTION)
CN701 8P
CONV AMP IC702
CONV-CONTROL IC701
FUNCTION SWITCH
CN693 7P
CN692 9P WHT
CN691 4P WHT
CN691 3P
CN689
CN682 2P
CPU IC901
DEF. CONTROL IC902
V-OUT IC401
PWM-CONT IC501
H-CENTER IC503
H-REG Q528
H-DRIVE Q963,Q981,Q982
H-DRIVE OUT Q511
H-OUT Q507
HV-REG Q503
HV-OUT Q518
FBT T501
HOT T505
HOT T504
DRIVER Q981,Q982
BUFFER Q521
BUFFER Q506
BUFFER Q508
SYNC LOCK Q522,Q523
H. CENT AMP Q518
H. CENT SW Q517
EEPROM IC985
SYN BUFF IC699
RESET IC694
RELAY DRIVE Q681
SW-REG CONT IC681
SW-REG OUT Q682
AC-RECT D681
LPF L682
IC683
ERROR AMP IC684
STBY CONTROL Q684
IC605 5V,12V REG DISABLE
HEATER SW Q680,Q684
BUFF Q565
SP-AMP Q564
DFT T503
S-CAP CHANGE Q512,Q513,Q514,Q515,Q516
ROTATION DRIVE IC682
SWITCH Q510
R588
CN612 1P GND
CN618 1P 1.2 KV
CN681 6P DY
CN682 9P WHT
CN683 2P
TO CRT
FOCUS
TO S-CAP CHANGE
TO H-CENTER IC503
TO H-CENTER IC503
185V
80V
15V
15V
+12V
+8V
+5V
R-45V0881-DELLDIH-BLK..

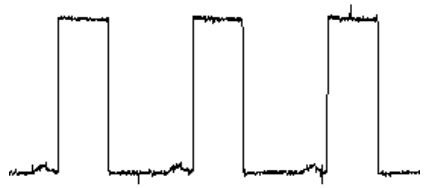

A (VIDEO)
SIGNAL IN
CN307 9P WHT :S-MICRO
BGND
BLUE
GGND
GREEN
RGND
RED
GND
VD
HD
IC901 CXA2055P PRE-AMP
IC902 LM2405 RGB OUTPUT
IC903 CXD9689P OSD
IC904 TDA6103Q CUT OFF AMP
IC905 NJM4558M CUT-OFF-CTRL
IC906 CXA2093AS RGB PRE-AMP
Q901 2SC5622 SPOT KILLER
Q904 2SC1623-LS SWITCH
D001 RD5.6ESB2
D003 RD5.6ESB2
D301 1SS226
D302 1SS226
D303 1SS226
D614 1SS119-25TD PROT
D204 HSS82 PROT
D304 HSS82 PROT
D104 HSS82 PROT
D105 HSS82 PROT
D205 HSS82 PROT
D305 HSS82 PROT
D106 HSS82 PROT
D206 HSS82 PROT
D306 HSS82 PROT
D106 HSS82 PROT
CN309 7P WHT :S-MICRO
HSYNC
GND
VSOUT
CSYNC
BPCLP
SHRP1
CBLK
TO D.BOARD CN903
CN306 6P WHT :S-MICRO
IICSDA
GND
IICSCL
GND
HRTRC
VRTRC
TO D.BOARD CN902
SIGNAL IN
CN310 4P WHT :S-MICRO
HOSTGND
DDCSDA
DDCSCL
NC
CN311 3P WHT :S-MICRO
DDCSCL
DDCSDA
HOSTGND
TO D.BOARD CN902
CN301 1P
1.2KV
TO D.BOARD CNS10
CN302
CN303
CN305 8P WHT :S-MICRO
STBY+5V
GND
+12V
H1
GND
+B0V
NC
+185V
TO D.BOARD CN902
STBY+5V
+12V
+185V
+B0V
B-#SV0001<DELLD1H>-A.

1



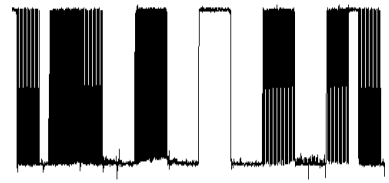
0.7 Vpk-pk

2



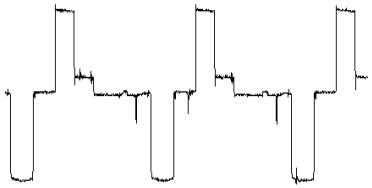
0.7 Vpk-pk

3



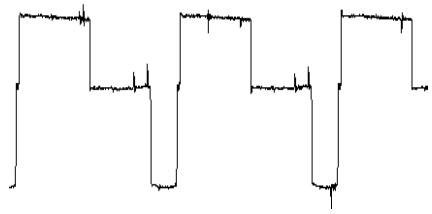
0.7 Vpk-pk

4



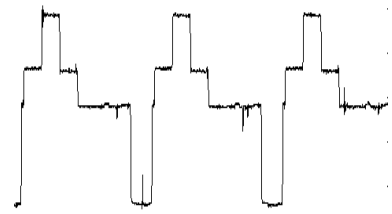
4.5 Vpk-pk

5



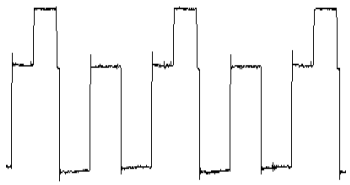
4.3 Vpk-pk

6



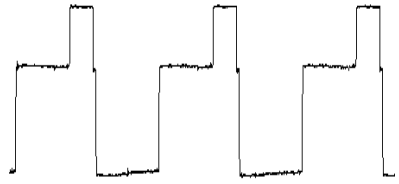
4.4 Vpk-pk

7 12



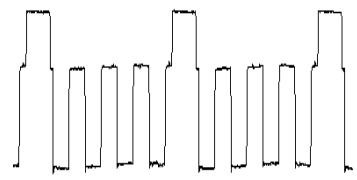
42.3 Vpk-pk

8 11



42.7 Vpk-pk

9 10



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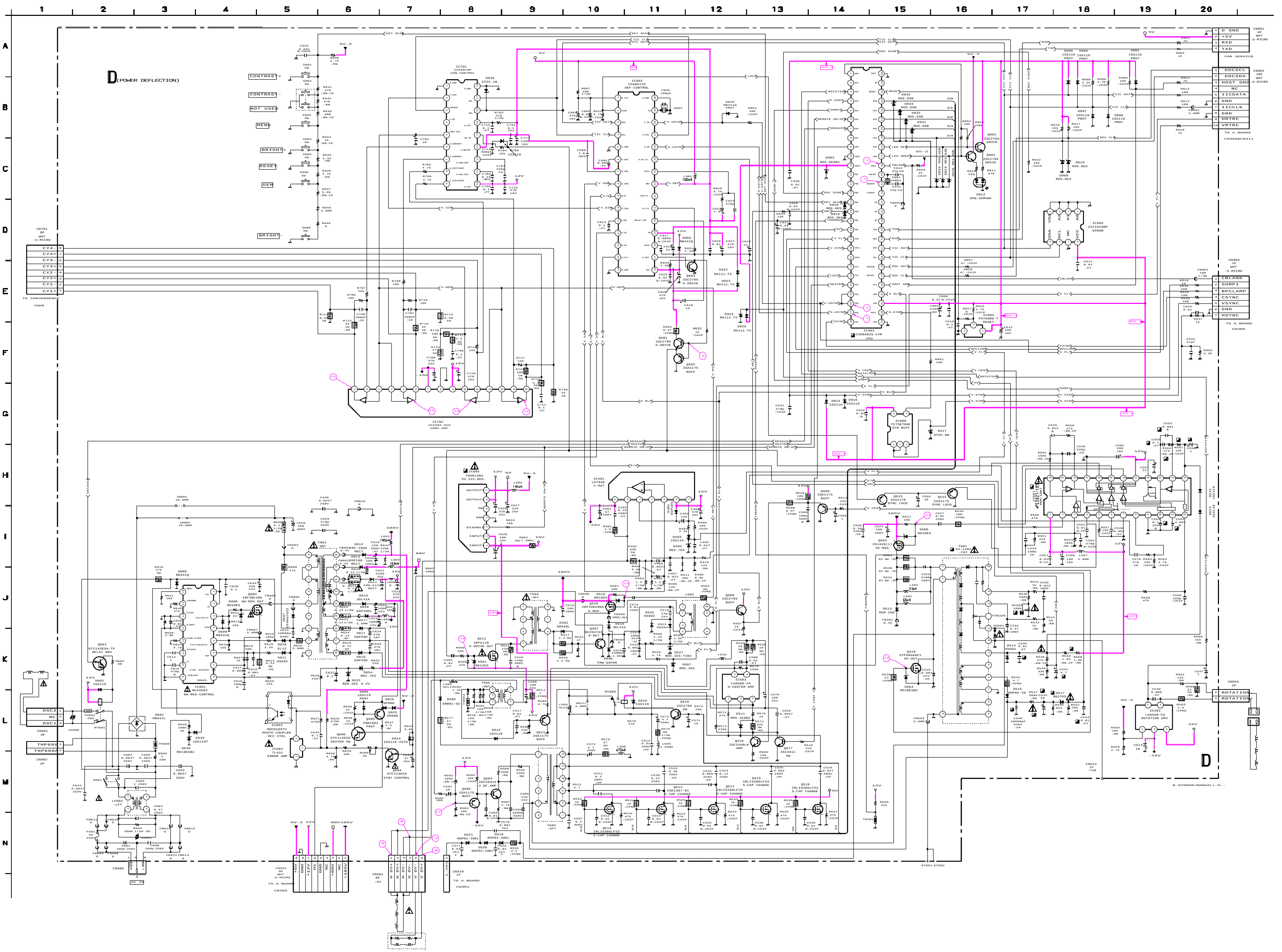
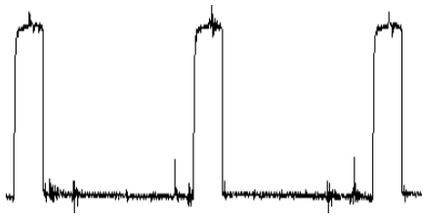


D (POWER DEFLECTION)
IC701 CXA8070P CON-CONTROL
IC902 CXA8071P DEF-CONTROL
IC901 CXD8692S-CYR CPU
IC905 CAT24C08P EPROM
IC904 PST600D-T RESET
IC900 TC7SET08F SYN BUFF
IC702 STK392-910 CONV-AMP
IC605 TDA8138A 5V,12V,REG.
IC401 LA7840 V-OUT
IC601 MC44604 SW-REG-CONTROL
IC603 MOC8105TV PHOTO COUPLER RCC CTRL
IC604 TL431 ERROR AMP
IC503 LA6500-FA H-CENTER AMP
IC501 μPC5021-109 PWM-CONT
IC502 LA6500-FA ROTATION DRV
T601 SRT
T504 HDT
T505 HST
T503 DFT
T501 NX-4400 FBT
CONTRAST+
CONTRAST-
NOT USED
MENU
BRIGHT+
RESET
GEM
BRIGHT-
CN701 8P WHT :S-MICRO
CY4- CY4+ CY3- CY3+ CY2- CY2+ CY1- CY1+
TO CONVERGENCE YOKE
CN901 4P WHT :S-MICRO
D GND +5V RXD TXD
FOR SERVICE
CN902 10P WHT :S-MICRO
DDCSCL DDCSDA HOST GND NC IICDATA GND IICCLK GND HRTRC VRTRC
TO A.BOARD CN306&CN311
CN903 7P WHT :S-MICRO
CBLANK SHRP1 BPCLAMP CSYNC VSYNC GND HSYNC
TO A.BOARD CN309
CN601 3P
DGC2 NC DGC1
CN602 2P
THP600 THP600A
CN600
AC IN
CN502 9P WHT :S-MICRO
+5V GND +12V H1 GND NC +80V NC +185V
TO A.BOARD CN305
CN501 6P :DY
H DY+ H DY+ H DY- H DY- V DY- V DY+
CN510 1P
1.2KV
TO A.BOARD CN301
CN503 2P
ROTATION- ROTATION+
CN512 1P :TUB
GT001 GT002
FOCUS
D
B-SV9080<MANUAL>-D..

1



4.9 Vpk-pk

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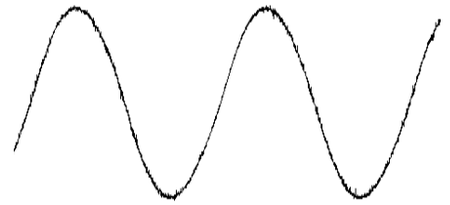
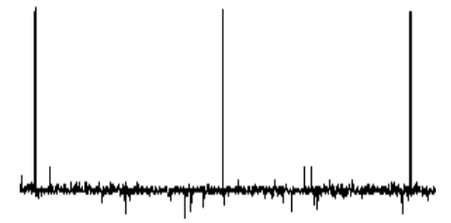


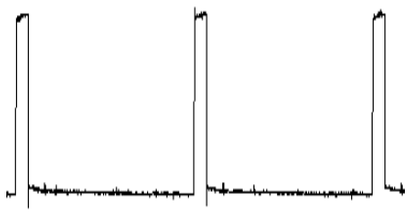
3.1 Vpk-pk

3



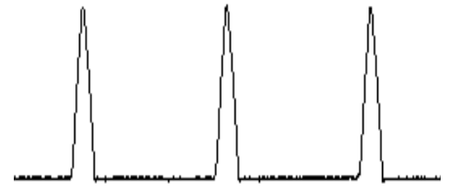
5.1 Vpk-pk

4



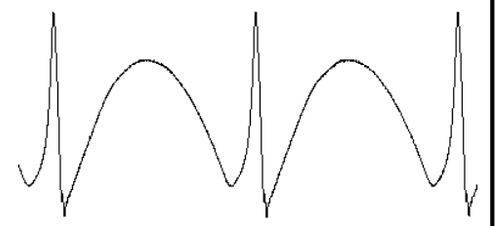
5.1 Vpk-pk

5



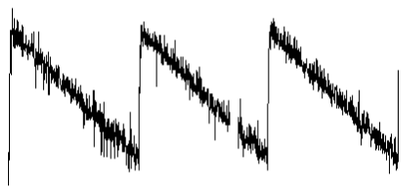
1.1 KVpk-pk

6



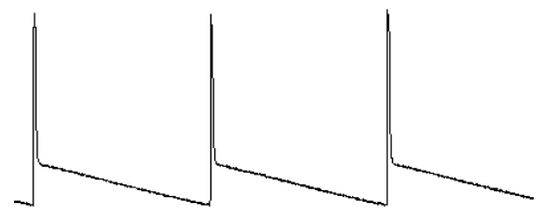
63.5 Vpk-pk

7



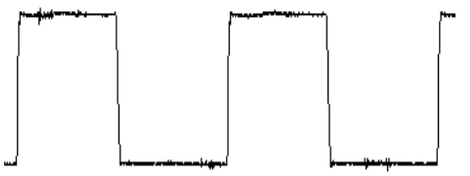
1.3 Vpk-pk

8



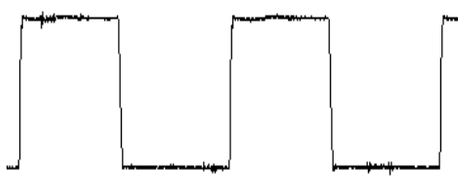
56.9 Vpk-pk

9



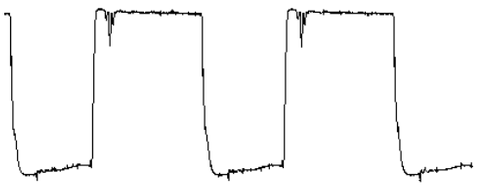
12.1 Vpk-pk

10



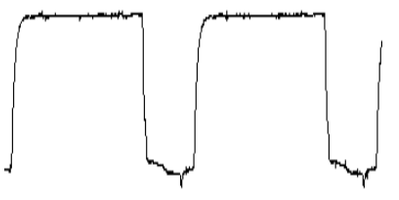
10.1 Vpk-pk

11



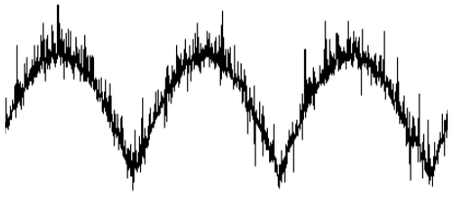
8.5 Vpk-pk

12



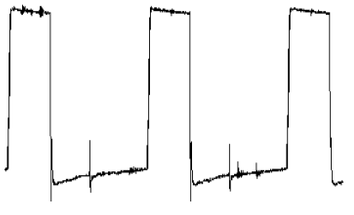
11.8 Vpk-pk

13



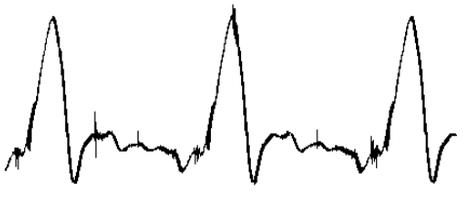
0.9 Vpk-pk

14



9.5 Vpk-pk

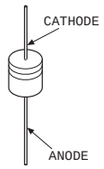
15



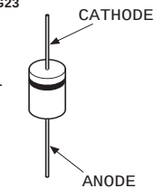
3.5-4.0 Vpk-pk

5-4. SEMICONDUCTORS

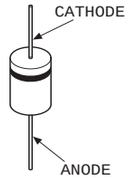
RB441QT-77
RD4.7ES
RD5.1ES
RD5.6ES-B2
RD8.2ES-B2
RD10ES-B2
RD12ES-B2
RD18ES-BS
RD27ES-B2
1SS119-25TD



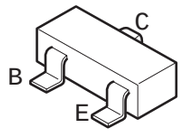
EGP10D
EGP20GPKG23
ELIZ
ERB91-02
GP08D
MUR160
RGP02-17EL



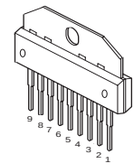
EGP30D
UF3ML-6505
UF4007G23
RGP02-20EL-6394
3DL41A (LC6-15)
HSS 82



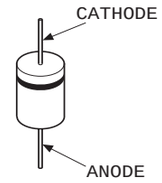
2SA1162-G



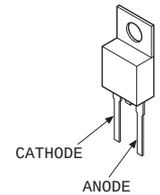
TDA6103Q



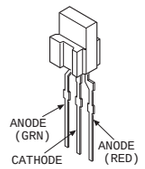
SB340L-6489



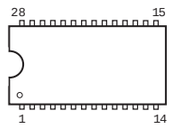
5TUZ52



SPB-26

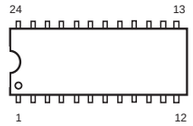


CXA2055P



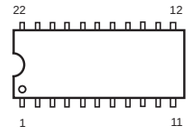
CXA8070A

UPC5021



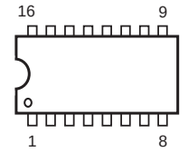
CXA8071P

CXA2093S

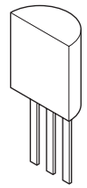


CXD8692

CXD8688P
MC44604
TDA7053A



TL 431CLP



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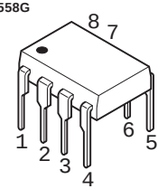
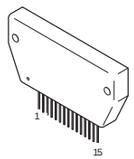
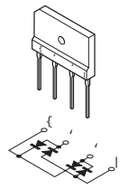


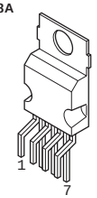
STK392-910



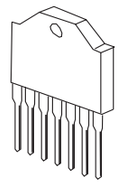
GBU4JL-6088



TDA 8138A



LA7840



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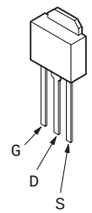
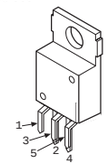


LA 6500-FA



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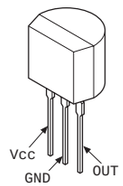

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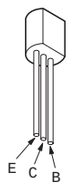

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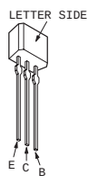

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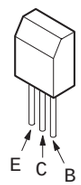

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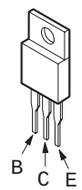

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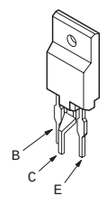

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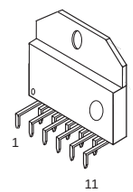

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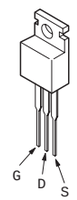

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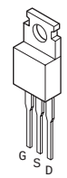

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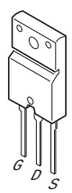

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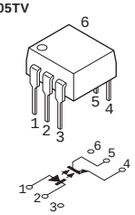

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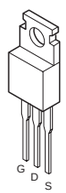


2SC3941

SECTION 6
EXPLODED VIEWS

• Items with no part number and no description are not stocked because they are seldom required for routine service.

• The component parts of an assembly are indicated by the reference numbers in the remarks column.

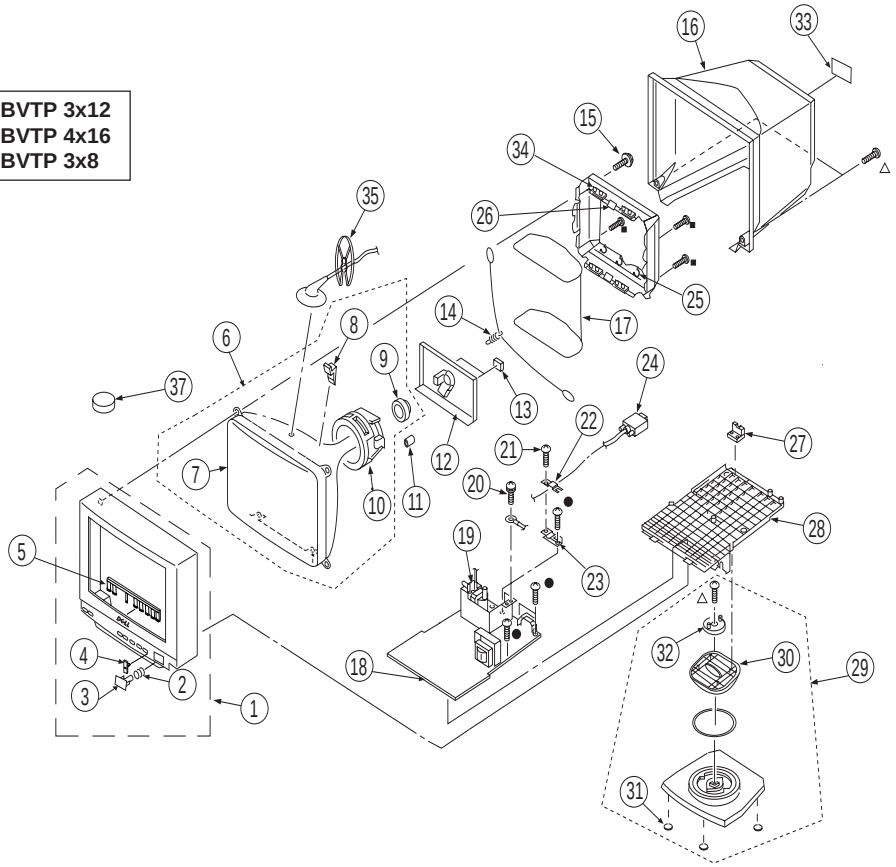
• Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

Note:

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

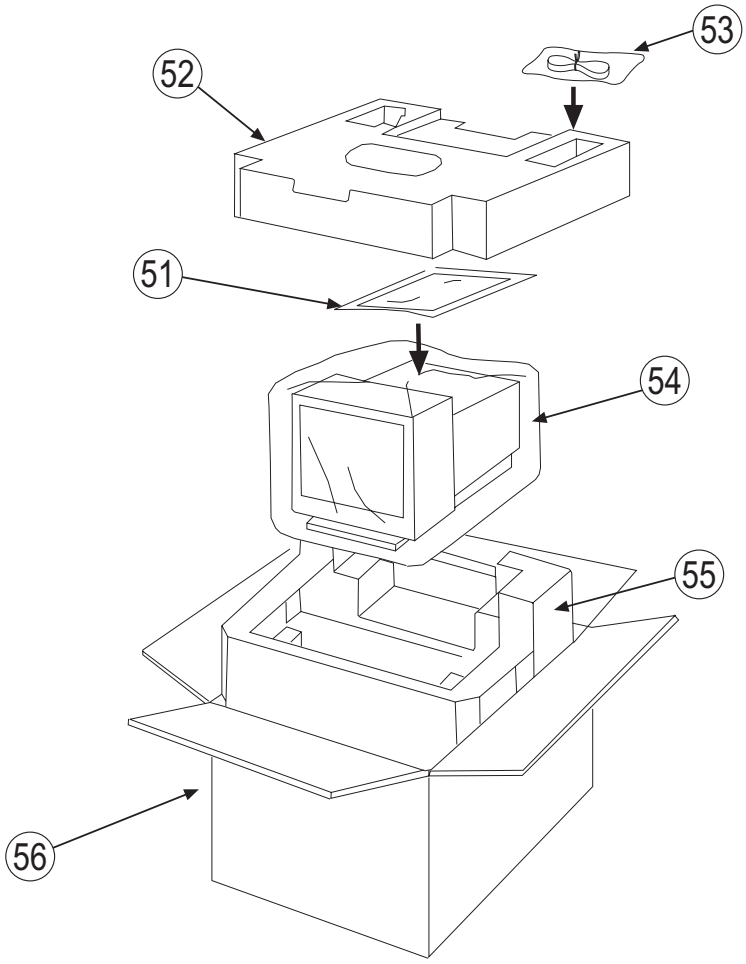
6-1. CHASSIS

● **7-685-648-79 SCREW +BVTP 3x12**
△ **7-685-663-71 SCREW +BVTP 4x16**
■ **7-685-646-79 SCREW +BVTP 3x8**



REF.NO.		PART NO.	DESCRIPTION	REMARK
1		X-4035-344-1	BEZEL ASSY	2-5
2		3-653-339-01	SPRING, COMPRESSION	
3		4-062-873-01	BUTTON, POWER	
4		4-062-874-01	GUIDE, LIGHT	
5	*	4-062-872-01	BUTTON, MULTI	
6	⚠	8-738-723-80	ITC ASSY, 17FRFM-R3 (EQ)	7-10
6	⚠	8-738-733-82	ITC ASSY, 17FRFM-R3 (J)	7-10
6	⚠	8-738-733-83	ITC ASSY, 17FRFM-R3 (NH)	7-10
7	⚠	8-738-733-05	CRT, 17FRFM (M41LKN15X) (NH)	
7	⚠	8-738-734-05	CRT, 17FRFM (M41LKN15X) (J)	
7	⚠	8-738-735-05	CRT, 17FRFM (M41LKN15X) (EQ)	
8		4-040-897-01	SPACER, DY	
9	⚠	1-452-912-11	NECK ASSY (NA-2914)	
10	⚠	8-451-490-11	DY Y17FRJ3-M	
11		1-500-386-11	FILTER CLAMP (FERRITE CORE)	
12	*	A-1298-460-A	A BOARD, COMPLETE	
13	*	4-061-329-01	CUSHION (A)	
14	*	4-061-316-01	SPRING, TENSION	
15		4-365-808-01	SCREW (5), TAPPING	
16	*	4-064-033-01	CABINET (EQ)	
16	*	4-061-989-11	CABINET (J, NH)	
17	⚠	1-416-282-21	COIL, DEMAGNETIZATION	
18	*	A-1346-718-A	D BOARD, COMPLETE	
19	⚠	1-453-241-11	TRANSFORMER ASSY, FLYBACK (NX-4400//X4L4)	
20		4-389-025-01	SCREW (M4x8)(EXT. TOOTHWASHER)	
21		7-685-881-09	SCREW + BVTT 4x8 (S)	
22	*	4-045-131-01	STOPPER, CABLE	
23	*	4-045-130-01	BRACKET, CABLE	
24	*	1-782-837-11	CABLE ASSY VIDEO (15P D-SUB)	
25		4-041-021-02	HOLDER, DEGAUSSING COIL (6)	
26		4-041-758-02	HOLDER, DEGAUSSING COIL (2)	
27	*	4-060-360-11	COVER, CABLE	
28	*	4-063-533-01	BRACKET, CHASSIS (EQ)	
28	*	4-061-987-01	BRACKET, CHASSIS (NH, J)	
29		X-4035-259-1	STAND BASE, ASSY	30-32
30		4-060-361-01	SLIDER	
31	*	4-060-996-01	CUSHION	
32		4-060-340-01	STOPPER (A)	
33	*	4-063-694-01	LABEL, INFORMATION (EQ)	
33	*	4-063-970-01	LABEL, INFORMATION (NH)	
33	*	4-062-971-01	LABEL, INFORMATION (J)	
34	*	4-056-260-01	SPACER, DEGAUSSER COIL	
35		3-704-372-01	HOLDER, HV CABLE	
37		1-452-032-00	MAGNET, DISC	

6-2. PACKING MATERIALS



REF.NO.	PART NO.	DESCRIPTION	REMARK
51	3-861-661-21	MANUAL, INSTRUCTION	
52 *	4-063-118-01	CUSHION (UPPER)	
53 ⚠	1-575-181-11	CORD SET, POWER (J)	
54 *	4-041-927-31	BAG, POLYETHYLENE	
55 *	4-063-119-01	CUSHION (LOWER)	
56 *	4-063-117-01	INDIVIDUAL CARTON	

SECTION 7
ELECTRICAL PARTS LIST

Note:

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

Note:

Les composants identifies per un trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

The components identified by ⧓ in this manual have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation. Should replacement be required, replace only with the value originally used.

- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

RESISTORS
- All resistors are in ohms
- F : nonflammable

CAPACITORS
- MF = µF

INDUCTORS
- UH = µH, MMH = mH

When indicating parts by reference number, please include the board name.

A

*** A-1298-460-A A BOARD, COMPLETE**

4-382-854-11 SCREW (M3X10), P, SW (+)

CAPACITOR

REF.NO.	PART NO.	DESCRIPTION			REMARK
C004	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C005	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C009	1-104-664-11	ELECT	47MF	20%	25V
C010	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C011	1-106-220-00	MYLAR	0.1MF	10%	100V
C012	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C013	1-128-528-11	ELECT	470MF	20%	16V
C014	1-128-562-11	ELECT	47MF	20%	100V
C015	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C018	1-107-652-11	ELECT	10MF	20%	200V
C019	1-137-399-11	FILM	0.1MF	5%	50V
C022	1-104-664-11	ELECT	47MF	20%	25V
C027	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C028	1-104-664-11	ELECT	47MF	20%	25V
C029	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C035	1-162-134-11	CERAMIC	470PF	10%	2KV
C042	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C044	1-164-344-11	CERAMIC CHIP	0.068MF	10%	25V
C046	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C047	1-104-664-11	ELECT	47MF	20%	25V
C048	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C049	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C050	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C051	1-104-664-11	ELECT	47MF	20%	25V
C053	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C054	1-137-528-11	FILM	0.1MF	10%	250V
C055	1-104-503-12	CERAMIC CHIP	0.1MF	10%	100V
C090	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C092	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C101	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C102	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C104	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C105	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C106	1-137-528-11	FILM	0.1MF	10%	250V
C201	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C202	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C204	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C205	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C206	1-137-528-11	FILM	0.1MF	10%	250V
C301	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C302	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C304	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C305	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C306	1-137-528-11	FILM	0.1MF	10%	250V

CONNECTOR

REF.NO.	PART NO.	DESCRIPTION	REMARK
CN301	1-506-108-41	PIN, CONNECTOR (TERMINAL PIN)	
CN302	1-695-915-11	TAB (CONTACT)	
CN303	1-695-915-11	TAB (CONTACT)	
CN305	1-564-511-11	PLUG, CONNECTOR 8P	
CN306 *	1-564-509-11	PLUG, CONNECTOR 6P	
CN307 *	1-564-512-11	PLUG, CONNECTOR 9P	
CN309 *	1-564-510-11	PLUG, CONNECTOR 7P	
CN310 *	1-564-507-11	PLUG, CONNECTOR 4P	
CN311 *	1-564-506-11	PLUG, CONNECTOR 3P	

DIODE

REF.NO.	PART NO.	DESCRIPTION	REMARK
D001	8-719-109-89	DIODE RD5.6ESB2	
D003	8-719-109-89	DIODE RD5.6ESB2	
D014	8-719-911-19	DIODE 1SS119-25	
D101	8-719-800-76	DIODE 1SS226	
D104	8-719-970-83	DIODE HSS82	
D105	8-719-970-83	DIODE HSS82	
D106	8-719-970-83	DIODE HSS82	
D201	8-719-800-76	DIODE 1SS226	

A

Note: The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

Note: Les composants identifies per un trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

REF.NO.	PART NO.	DESCRIPTION	REMARK
D204	8-719-970-83	DIODE HSS82	
D205	8-719-970-83	DIODE HSS82	
D206	8-719-970-83	DIODE HSS82	
D301	8-719-800-76	DIODE 1SS226	
D304	8-719-970-83	DIODE HSS82	
D305	8-719-970-83	DIODE HSS82	
D306	8-719-970-83	DIODE HSS82	
	FERRITE BEAD		
FB001	1-412-911-11	FERRITE	
FB003	1-412-911-11	FERRITE	
FB004	1-412-911-11	FERRITE	
FB005	1-412-911-11	FERRITE	
FB006	1-412-911-11	FERRITE	
FB009	1-412-911-11	FERRITE	
FB010	1-412-911-11	FERRITE	
FB011	1-412-911-11	FERRITE	
FB012	1-412-911-11	FERRITE	
FB101 ⚠	1-216-295-91	SHORT	
FB110	1-412-911-11	FERRITE	
FB201 ⚠	1-216-295-91	SHORT	
FB210	1-412-911-11	FERRITE	
FB301 ⚠	1-216-295-91	SHORT	
FB310	1-412-911-11	FERRITE	
	FILTER		
FL001	1-421-928-11	FILTER, NOISE	
FL002	1-412-911-11	FERRITE	
FL101	1-414-793-21	FERRITE	
FL201	1-414-793-21	FERRITE	
FL301	1-414-793-21	FERRITE	
	IC		
IC001	8-752-076-89	IC CXA2055P	
IC002	8-759-435-33	IC LM2405T	
IC003	8-759-478-65	IC CXD8688P	
IC004	8-759-434-40	IC TDA6103Q/N3,112	
IC005	8-759-100-96	IC UPC4558G2	
IC006	8-752-082-65	IC CXA2093S	
	JACK		
J001 ⚠	1-251-598-11	SOCKET, CRT	
	COIL		
L002	1-410-682-31	INDUCTOR 470UH	
L101	1-410-750-41	INDUCTOR 0.47UH	
L201	1-410-750-41	INDUCTOR 0.47UH	
L301	1-410-750-41	INDUCTOR 0.47UH	

REF.NO.	PART NO.	DESCRIPTION			REMARK
	TRANSISTOR				
Q001	8-729-032-61	TRANSISTOR 2SC5022-02			
Q004	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
	RESISTOR				
R002	1-216-053-00	RES,CHIP	1.5K	5%	1/10W
R003	1-216-067-00	RES,CHIP	5.6K	5%	1/10W
R004	1-216-055-00	RES,CHIP	1.8K	5%	1/10W
R005	1-216-113-00	RES,CHIP	470K	5%	1/10W
R006	1-216-025-91	RES,CHIP	100	5%	1/10W
R007	1-216-025-91	RES,CHIP	100	5%	1/10W
R014	1-216-025-91	RES,CHIP	100	5%	1/10W
R016	1-216-073-00	RES,CHIP	10K	5%	1/10W
R017	1-216-025-91	RES,CHIP	100	5%	1/10W
R018	1-216-025-91	RES,CHIP	100	5%	1/10W
R020	1-216-025-91	RES,CHIP	100	5%	1/10W
R021	1-216-025-91	RES,CHIP	100	5%	1/10W
R024	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R025	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R026	1-216-073-00	RES,CHIP	10K	5%	1/10W
R029	1-216-099-00	RES,CHIP	120K	5%	1/10W
R031	1-216-049-91	RES,CHIP	1K	5%	1/10W
R032	1-216-063-91	RES,CHIP	3.9K	5%	1/10W
R033	1-216-077-00	RES,CHIP	15K	5%	1/10W
R043	1-216-295-91	SHORT			
R045	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R046	1-216-097-91	RES,CHIP	100K	5%	1/10W
R047	1-216-073-00	RES,CHIP	10K	5%	1/10W
R048	1-211-885-21	METAL	2.2M	5%	1W
R049	1-216-095-00	RES,CHIP	82K	5%	1/10W
R051	1-216-049-91	RES,CHIP	1K	5%	1/10W
R052	1-216-073-00	RES,CHIP	10K	5%	1/10W
R053	1-219-621-91	METAL	22M	10%	1/4W
R054	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R064	1-202-830-00	SOLID	10K	20%	1/2W
R101	1-215-394-00	METAL	75	1%	1/4W
R104	1-216-021-00	RES,CHIP	68	5%	1/10W
R106	1-216-073-00	RES,CHIP	10K	5%	1/10W
R107	1-216-067-00	RES,CHIP	5.6K	5%	1/10W
R108	1-216-069-00	RES,CHIP	6.8K	5%	1/10W
R109	1-216-121-91	RES,CHIP	1M	5%	1/10W
R110	1-215-477-00	METAL	220K	1%	1/4W
R111	1-249-401-11	CARBON	47	5%	1/4W F
R112	1-216-033-00	RES,CHIP	220	5%	1/10W
R133	1-249-411-11	CARBON	330	5%	1/4W
R151	1-202-549-00	SOLID	100	20%	1/2W
R201	1-215-394-00	METAL	75	1%	1/4W

Note: The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

Note: Les composants identifies per un trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une

REF.NO.	PART NO.	DESCRIPTION				REMARK
R204	1-216-021-00	RES,CHIP	68	5%	1/10W	
R206	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R207	1-216-067-00	RES,CHIP	5.6K	5%	1/10W	
R208	1-216-069-00	RES,CHIP	6.8K	5%	1/10W	
R209	1-216-121-91	RES,CHIP	1M	5%	1/10W	
R210	1-215-477-00	METAL	220K	1%	1/4W	
R211	1-249-401-11	CARBON	47	5%	1/4W	F
R212	1-216-021-00	RES,CHIP	68	5%	1/10W	
R233	1-249-411-11	CARBON	330	5%	1/4W	
R251	1-202-549-00	SOLID	100	20%	1/2W	
R301	1-215-394-00	METAL	75	1%	1/4W	
R304	1-216-021-00	RES,CHIP	68	5%	1/10W	
R306	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R307	1-216-067-00	RES,CHIP	5.6K	5%	1/10W	
R308	1-216-069-00	RES,CHIP	6.8K	5%	1/10W	
R309	1-216-121-91	RES,CHIP	1M	5%	1/10W	
R310	1-215-477-00	METAL	220K	1%	1/4W	
R311	1-249-401-11	CARBON	47	5%	1/4W	F
R312	1-216-029-00	RES,CHIP	150	5%	1/10W	
R333	1-249-411-11	CARBON	330	5%	1/4W	
R351	1-202-549-00	SOLID	100	20%	1/2W	

SPARK GAP

SG001⚠	1-519-422-11	GAP, SPARK	
SG101⚠	1-517-499-21	GAP, SPARK	
SG201⚠	1-517-499-21	GAP, SPARK	
SG301⚠	1-517-499-21	GAP, SPARK	

D

*** A-1346-718-A D BOARD, COMPLETE**

1-533-223-11	CLIP, FUSE	
1-923-512-76	WIRE UL1032 AWG22 65MM BLU	
2-371-561-00	BUSHING (P), INSULATING	
4-034-094-01	SHEET, INSULATOR	
4-051-602-11	SHEET, RADIATION	
4-061-982-01	HOLDER, LED	
4-382-854-11	SCREW (M3X10), P, SW (+)	
4-382-854-21	SCREW (M3X14), P, SW (+)	
4-389-025-01	SCREW (M4) (EXT TOOTH WASHER)	
7-685-647-79	SCREW +BVTP	3X10 TYPE2

CAPACITOR

C401	1-107-932-11	ELECT	47MF	20%	100V
C402	1-106-228-00	MYLAR	0.22MF	10%	100V
C403	1-126-969-11	ELECT	220MF	20%	50V

REF.NO.	PART NO.	DESCRIPTION			REMARK
C404	1-126-941-11	ELECT	470MF	20%	25V
C405	1-137-374-11	FILM	0.047MF	5%	50V
C406	1-137-368-11	FILM	0.0047MF	5%	50V
C407	1-137-372-11	FILM	0.022MF	5%	50V
C501	1-126-964-11	ELECT	10MF	20%	50V
C502	1-137-370-11	FILM	0.01MF	5%	50V
C503	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C504	1-164-645-11	CERAMIC	1000PF	10%	500V
C505	1-109-879-11	CERAMIC	22PF	5%	2KV
C506	1-126-960-11	ELECT	1MF	20%	50V
C507	1-117-964-11	FILM	0.3MF	5%	400V
C508	1-104-665-11	ELECT	100MF	20%	25V
C509	1-162-117-00	CERAMIC	100PF	10%	500V
C510	1-102-228-00	CERAMIC	470PF	10%	500V
C511	1-119-862-11	FILM	0.3MF	5%	200V
C512	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C513	1-126-964-11	ELECT	10MF	20%	50V
C514	1-119-861-11	FILM	0.91MF	5%	200V
C515	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C516	1-117-206-21	FILM	0.36MF	5%	250V
C517	1-137-370-11	FILM	0.01MF	5%	50V
C518	1-117-954-11	FILM	4300PF	3%	1.8KV
C519	1-136-538-11	FILM	0.001MF	3%	2KV
C520	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C521	1-107-444-11	CERAMIC	100PF	5%	2KV
C522	1-136-481-11	MYLAR	0.0022MF	10%	100V
C523	1-115-511-11	FILM	0.12MF	5%	250V
C524	1-107-955-11	ELECT	100MF	20%	200V
C525	1-119-860-11	FILM	0.082MF	5%	200V
C526	1-164-646-11	CERAMIC	2200PF	10%	500V
C527	1-117-879-91	CAPACITOR	0.01MF	10%	250V
C528	1-115-349-51	CERAMIC	0.01MF		2KV
C529	1-136-060-00	FILM	0.047MF	5%	400V
C530	1-115-511-11	FILM	0.12MF	5%	250V
C531	1-115-509-11	FILM	0.068MF	5%	250V
C532	1-137-426-11	FILM	0.47MF	10%	100V
C535	1-137-370-11	FILM	0.01MF	5%	50V
C536	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C538	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C539	1-137-418-11	FILM	0.022MF	10%	100V
C540	1-136-203-11	FILM	10000PF	5%	630V
C541 ⚠	1-126-963-11	ELECT	4.7MF	20%	50V
C542	1-126-964-11	ELECT	10MF	20%	50V
C543	1-102-973-00	CERAMIC	100PF	5%	50V
C544	1-137-370-11	FILM	0.01MF	5%	50V
C545	1-163-037-11	CERAMIC CHIP	0.022MF	10%	50V
C546	1-163-259-91	CERAMIC CHIP	220PF	5%	50V
C547	1-126-960-11	ELECT	1MF	20%	50V
C548	1-137-364-11	FILM	0.001MF	5%	50V

Note: The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

Note: Les composants identifies per un trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

REF.NO.	PART NO.	DESCRIPTION			REMARK
C549	1-137-375-11	FILM	0.068MF	5%	50V
C550	1-126-933-11	ELECT	100MF	20%	16V
C551	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C552	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C553	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C554	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C555	1-137-399-11	FILM	0.1MF	5%	50V
C556	1-163-259-91	CERAMIC CHIP	220PF	5%	50V
C557	1-126-965-11	ELECT	22MF	20%	50V
C558	1-126-960-11	ELECT	1MF	20%	50V
C559	1-137-368-11	FILM	0.0047MF	5%	50V
C560	1-117-206-21	FILM	0.36MF	5%	250V
C561	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C562	1-126-933-11	ELECT	100MF	20%	16V
C563	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C570	1-104-665-11	ELECT	100MF	20%	25V
C571	1-126-964-11	ELECT	10MF	20%	50V
C572	1-107-651-11	ELECT	4.7MF	20%	250V
C573	1-107-651-11	ELECT	4.7MF	20%	250V
C574	1-117-879-91	CAPACITOR	0.01MF	10%	250V
C575	1-107-955-11	ELECT	100MF	20%	200V
C576	1-163-243-11	CERAMIC CHIP	47PF	5%	50V
C577	1-115-349-51	CERAMIC	0.01MF		2KV
C578	1-117-214-11	CERAMIC	0.001MF	10%	2KV
C579	1-109-879-11	CERAMIC	22PF	5%	2KV
C580	1-137-370-11	FILM	0.01MF	5%	50V
C582	1-126-964-11	ELECT	10MF	20%	50V
C601 ⚠	1-113-894-11	CERAMIC	100PF	10%	250V
C602 ⚠	1-113-912-11	CERAMIC	0.0047MF	20%	250V
C604 ⚠	1-104-708-11	FILM	0.47MF	20%	250V
C605 ⚠	1-107-533-11	FILM	1MF	20%	250V
C606 ⚠	1-113-912-11	CERAMIC	0.0047MF	20%	250V
C608 ⚠	1-113-894-11	CERAMIC	100PF	10%	250V
C610	1-109-984-11	ELECT(BLOCK)	390MF	20%	400V
C613	1-136-203-11	FILM	10000PF	5%	630V
C614	1-136-177-00	FILM	1MF	5%	50V
C615	1-137-364-11	FILM	0.001MF	5%	50V
C616	1-102-824-00	CERAMIC	470PF	5%	50V
C617	1-137-364-11	FILM	0.001MF	5%	50V
C618	1-102-106-00	CERAMIC	100PF	10%	50V
C619	1-125-700-11	ELECT(BLOCK)	220MF	20%	200V
C620	1-107-933-11	ELECT	100MF	20%	100V
C621	1-107-890-11	ELECT	2200MF	20%	25V
C622	1-126-941-11	ELECT	470MF	20%	25V
C623	1-126-942-61	ELECT	1000MF	20%	25V
C624	1-126-935-11	ELECT	470MF	20%	16V
C625	1-137-399-11	FILM	0.1MF	5%	50V
C626	1-107-889-11	ELECT	220MF	20%	25V
C627	1-107-889-11	ELECT	220MF	20%	25V
C628	1-104-665-11	ELECT	100MF	20%	25V
C629	1-113-900-11	CERAMIC	470PF	10%	250V
C630	1-137-399-11	FILM	0.1MF	5%	50V
C632	1-107-914-11	ELECT	1000MF	20%	25V
C633	1-126-935-11	ELECT	470MF	20%	16V
C634	1-126-940-11	ELECT	330MF	20%	25V
C635	1-137-370-11	FILM	0.01MF	5%	50V
C637	1-137-399-11	FILM	0.1MF	5%	50V
C640	1-113-912-11	CERAMIC	0.0047MF	20%	250V
C642 ⚠	1-113-912-11	CERAMIC	0.0047MF	20%	250V
C643 ⚠	1-113-912-11	CERAMIC	0.0047MF	20%	250V
C644	1-104-664-11	ELECT	47MF	20%	25V
C701	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C702	1-126-964-11	ELECT	10MF	20%	50V
C703	1-136-169-00	FILM	0.22MF	5%	50V
C704	1-163-259-91	CERAMIC CHIP	220PF	5%	50V
C705	1-137-399-11	FILM	0.1MF	5%	50V
C706	1-102-973-00	CERAMIC	100PF	5%	50V
C707	1-102-973-00	CERAMIC	100PF	5%	50V
C708	1-137-399-11	FILM	0.1MF	5%	50V
C709	1-126-941-11	ELECT	470MF	20%	25V
C710	1-126-941-11	ELECT	470MF	20%	25V
C711	1-137-399-11	FILM	0.1MF	5%	50V
C712	1-137-399-11	FILM	0.1MF	5%	50V
C713	1-126-927-11	ELECT	2200MF	20%	10V
C714	1-163-131-00	CERAMIC CHIP	390PF	5%	50V
C715	1-126-935-11	ELECT	470MF	20%	16V
C902	1-126-935-11	ELECT	470MF	20%	16V
C903	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C905	1-137-375-11	FILM	0.068MF	5%	50V
C906	1-136-177-00	FILM	1MF	5%	50V
C908	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C909	1-126-927-11	ELECT	2200MF	20%	10V
C910	1-137-399-11	FILM	0.1MF	5%	50V
C911	1-137-370-11	FILM	0.01MF	5%	50V
C912	1-126-933-11	ELECT	100MF	20%	16V
C913	1-137-399-11	FILM	0.1MF	5%	50V
C914	1-102-514-11	CERAMIC	22PF	5%	50V
C915	1-102-514-11	CERAMIC	22PF	5%	50V
C916	1-126-965-11	ELECT	22MF	20%	50V
C917	1-163-019-00	CERAMIC CHIP	0.0068MF	10%	50V
C918	1-126-964-11	ELECT	10MF	20%	50V
C920	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C921	1-126-935-11	ELECT	470MF	20%	16V
C922	1-126-960-11	ELECT	1MF	20%	50V
C923	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C924	1-126-965-11	ELECT	22MF	20%	50V

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REF.NO.	PART NO.	DESCRIPTION			REMARK
C925	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C926	1-126-935-11	ELECT	470MF	20%	16V
C927	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C928	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C929	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C930	1-137-370-11	FILM	0.01MF	5%	50V
C931	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C932	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C933	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C934	1-163-243-11	CERAMIC CHIP	47PF	5%	50V
C936	1-163-251-11	CERAMIC CHIP	100PF	5%	50V

CONNECTOR

CN501 *	1-580-798-11	CONNECTOR PIN (DY) 6P	
CN502 *	1-564-512-11	PLUG, CONNECTOR 9P	
CN510 *	1-900-802-12	CONNECTOR, 1P MINI	
CN512	1-695-915-11	TAB (CONTACT)	
CN600 ⚠	1-251-227-11	INLET, AC	
CN601	1-691-960-11	PIN, CONNECTOR (PC BOARD) 3P	
CN602 *	1-506-371-00	PIN, CONNECTOR 2P	
CN701	1-564-511-11	PLUG, CONNECTOR 8P	
CN901 *	1-508-879-11	BASE POST	
CN902	1-564-513-11	PLUG, CONNECTOR 10P	
CN903 *	1-564-510-11	PLUG, CONNECTOR 7P	

DIODE

D401	8-719-979-58	DIODE EGP10D	
D402	8-719-109-81	DIODE RD4.7ESB2	
D403	8-719-911-19	DIODE 1SS119-25	
D501	8-719-110-31	DIODE RD12ESB2	
D502	8-719-975-77	DIODE SB340	
D504	8-719-110-49	DIODE RD18ESB2	
D505	8-719-941-74	DIODE ERB91-02	
D506	8-719-061-21	DIODE FMQ-G5FMS	
D507	8-719-109-85	DIODE RD5.1ESB2	
D509	8-719-110-17	DIODE RD10ESB2	
D510	8-719-018-82	DIODE RGP02-20EL-6394	
D511	8-719-109-85	DIODE RD5.1ESB2	
D512	8-719-911-19	DIODE 1SS119-25	
D513	8-719-066-40	DIODE MUR160	
D514	8-719-970-83	DIODE HSS82	
D515	8-719-018-82	DIODE RGP02-20EL-6394	
D516	8-719-051-97	DIODE 3DL41A(LC6-15)	
D517 ⚠	8-719-110-67	DIODE RD27ESB2	
D518	8-719-110-17	DIODE RD10ESB2	
D519	8-719-911-19	DIODE 1SS119-25	
D520	8-719-018-82	DIODE RGP02-20EL-6394	
D521	8-719-018-82	DIODE RGP02-20EL-6394	
D522	8-719-911-19	DIODE 1SS119-25	
D523	8-719-911-19	DIODE 1SS119-25	
D524	8-719-970-83	DIODE HSS82	
D525	8-719-970-83	DIODE HSS82	
D527	8-719-109-85	DIODE RD5.1ESB2	
D601 ⚠	8-719-025-88	DIODE GBU4JL-6088	
D602	8-719-911-19	DIODE 1SS119-25	
D605	8-719-911-19	DIODE 1SS119-25	
D606	8-719-986-73	DIODE RB441Q	
D607	8-719-053-19	DIODE UF4007G23	
D608	8-719-110-49	DIODE RD18ESB2	
D609	8-719-986-73	DIODE RB441Q	
D610	8-719-302-43	DIODE EL1Z	
D611	8-719-970-83	DIODE HSS82	
D612	8-719-067-68	DIODE FMC-26UA	
D613	8-719-979-58	DIODE EGP10D	
D614	8-719-058-38	DIODE FMN-G12S	
D615	8-719-051-97	DIODE 3DL41A(LC6-15)	
D616	8-719-048-61	DIODE EGP20DL-6349	
D617	8-719-979-84	DIODE EGP20DPKG23	
D618	8-719-979-84	DIODE EGP20DPKG23	
D622	8-719-110-08	DIODE RD8.2ESB2	
D624	8-719-911-19	DIODE 1SS119-25	
D625	8-719-908-03	DIODE GP08D	
D626	8-719-908-03	DIODE GP08D	
D629	1-215-449-00	METAL 15K	1% 1/4W
D648 ⚠	8-719-110-36	DIODE RD13ESB2	
D649 ⚠	8-719-991-33	DIODE 1SS133T-77	
D654	8-719-109-60	DIODE RD2.7ESB2	
D704	8-719-911-19	DIODE 1SS119-25	
D901	8-719-911-19	DIODE 1SS119-25	
D902	8-719-109-89	DIODE RD5.6ESB2	
D903	8-719-986-73	DIODE RB441Q	
D905	8-719-911-19	DIODE 1SS119-25	
D906	8-719-911-19	DIODE 1SS119-25	
D907	8-719-911-19	DIODE 1SS119-25	
D908	8-719-911-19	DIODE 1SS119-25	
D909	8-719-109-89	DIODE RD5.6ESB2	
D910	8-719-109-89	DIODE RD5.6ESB2	
D912	8-719-045-19	DIODE SPB-26MVWF	
D914	8-719-911-19	DIODE 1SS119-25	
D916	8-719-911-19	DIODE 1SS119-25	
D917	8-719-158-15	DIODE RD5.6SB	
D918	8-719-109-89	DIODE RD5.6ESB2	
D919	8-719-109-89	DIODE RD5.6ESB2	

D

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REF.NO.	PART NO.	DESCRIPTION			REMARK
D920	8-719-986-73	DIODE RB441Q			
D922	8-719-404-49	DIODE MA111			
D923	8-719-404-49	DIODE MA111			
D924	8-719-404-49	DIODE MA111			
D925	8-719-404-49	DIODE MA111			
D928	8-719-158-15	DIODE RD5.6SB			
D929	8-719-158-15	DIODE RD5.6SB			
D930	8-719-158-15	DIODE RD5.6SB			
D931	8-719-158-15	DIODE RD5.6SB			
D932	8-719-158-15	DIODE RD5.6SB			
D933	8-719-158-15	DIODE RD5.6SB			
D934	8-719-158-15	DIODE RD5.6SB			
D935	8-719-976-99	DIODE DTZ5.1B			

FUSE

F601 ⚠	1-576-231-11	FUSE (H.B.C.) 4A/250V			

FERRITE BEAD

FB502	1-410-396-41	FERRITE	0.45UH		
FB504	1-412-911-11	FERRITE			
FB506	1-412-911-11	FERRITE			
FB601	1-410-396-41	FERRITE	0.45UH		
FB602	1-410-396-41	FERRITE	0.45UH		
FB603	1-412-911-11	FERRITE			
FB604	1-412-911-11	FERRITE			
FB605	1-412-911-11	FERRITE			
FB606	1-410-396-41	FERRITE	0.45UH		
FB608 ⚠	1-412-911-11	FERRITE			
FB609 ⚠	1-412-911-11	FERRITE			
FB610 ⚠	1-412-911-11	FERRITE			
FB611 ⚠	1-412-911-11	FERRITE			
FB612 ⚠	1-412-911-11	FERRITE			
FB613 ⚠	1-412-911-11	FERRITE			
FB614 ⚠	1-412-911-11	FERRITE			
FB615 ⚠	1-412-911-11	FERRITE			
FB616	1-412-911-11	FERRITE			
FB617	1-412-911-11	FERRITE			
FB902	1-247-807-31	CARBON	100	5%	1/4W
FB904	1-543-961-11	FERRITE			

TERMINAL

GT001 *	1-537-738-21	TERMINAL, EARTH			
GT002 *	1-537-738-21	TERMINAL, EARTH			

IC

IC401	8-759-444-83	IC LA7840L			
IC501 ⚠	8-759-478-76	IC UPC5021-109			
IC502	8-759-803-42	IC LA6500-FA			
IC503	8-759-803-42	IC LA6500-FA			
IC601 ⚠	8-759-399-81	IC MC44603P			
IC603 ⚠	8-749-012-59	IC MOC8105TV			
IC604 ⚠	8-759-908-15	IC TL431CLP			
IC605 ⚠	8-759-072-98	IC TDA8138A			
IC701	8-759-478-66	IC CXA8070P			
IC702	8-749-014-32	IC STK392-910A			
IC900	8-759-525-10	IC TC7SET08F(TE85L)			
IC901	8-759-531-39	IC CXD8692S-CYR(OTP)			
IC902	8-759-478-68	IC CXA8071P			
IC904	8-759-165-81	IC PST600D-T			
IC905	8-759-370-34	IC ST24C08FB6			

CHIP CONDUCTOR

JR001	1-216-296-91	SHORT			
JR002	1-216-296-91	SHORT			
JR003	1-216-296-91	SHORT			
JR004	1-216-296-91	SHORT			
JR005	1-216-296-91	SHORT			
JR006	1-216-296-91	SHORT			
JR007	1-216-296-91	SHORT			
JR008	1-216-296-91	SHORT			
JR009	1-216-296-91	SHORT			
JR010	1-216-296-91	SHORT			
JR011	1-216-296-91	SHORT			
JR013	1-216-296-91	SHORT			
JR014	1-216-296-91	SHORT			
JR015	1-216-296-91	SHORT			
JR016	1-216-296-91	SHORT			
JR017	1-216-296-91	SHORT			
JR018	1-216-296-91	SHORT			
JR019	1-216-296-91	SHORT			
JR020	1-216-296-91	SHORT			
JR021	1-216-296-91	SHORT			
JR022	1-216-296-91	SHORT			
JR023	1-216-296-91	SHORT			
JR024	1-216-296-91	SHORT			
JR025	1-216-296-91	SHORT			
JR026	1-216-296-91	SHORT			
JR027	1-216-296-91	SHORT			
JR028	1-216-296-91	SHORT			
JR029	1-216-296-91	SHORT			
JR030	1-216-295-91	SHORT			

COIL

L501	1-412-531-31	INDUCTOR	33UH		

Note: The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

Note: Les composants identifies per un trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

REF.NO.	PART NO.	DESCRIPTION	REMARK
L502	1-412-531-31	INDUCTOR 33UH	
L503	1-411-594-11	INDUCTOR	
L505	1-412-552-11	INDUCTOR 2.2MMH	
L506	1-412-545-11	INDUCTOR 470UH	
L508	1-416-394-11	COIL, HORIZONTAL LINEARITY	
L509	1-416-393-11	COIL, HORIZONTAL LINEARITY	
L510	1-416-367-11	COIL, HORIZONTAL CENTER	
L603	1-412-537-31	INDUCTOR 100UH	
L604	1-412-537-31	INDUCTOR 100UH	
L605	1-406-665-11	INDUCTOR	
L606	1-406-665-11	INDUCTOR	
L901	1-412-537-31	INDUCTOR 100UH	
L902	1-412-537-31	INDUCTOR 100UH	
		FILTER	
LF602 ⚠	1-429-180-11	TRANSFORMER, LINE FILTER	
		TRANSISTOR	
Q501	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q502	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q503	8-729-035-54	TRANSISTOR 2SJ449	
Q504	8-729-031-89	TRANSISTOR 2SC3941A-Q(TA)	
Q505	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q506	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q507	8-729-041-64	TRANSISTOR BU2527AX-ON5020	
Q508	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q510	8-729-042-45	TRANSISTOR STP5NA80FI	
Q511⚠	8-729-042-34	TRANSISTOR IRFU110A	
Q512	8-729-043-16	TRANSISTOR IRLI520GLF33	
Q513	8-729-021-79	TRANSISTOR 2SK1307	
Q514	8-729-041-93	TRANSISTOR IRLI530GLF33	
Q515	8-729-043-16	TRANSISTOR IRLI520GLF33	
Q516	8-729-043-16	TRANSISTOR IRLI520GLF33	
Q517	8-729-326-11	TRANSISTOR 2SC2611	
Q518	8-729-140-50	TRANSISTOR 2SC3209LK	
Q519	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q520	8-729-042-23	TRANSISTOR IRFI9620GSLF35	
Q521	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q522	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q523	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q601	8-729-029-92	TRANSISTOR DTC143ESA	
Q602 ⚠	8-729-926-79	TRANSISTOR IRFIBC40	
Q604 ⚠	8-729-029-66	TRANSISTOR DTC114ESA	
Q605	8-729-141-83	TRANSISTOR 2SB1094-LK	
Q606	8-729-029-66	TRANSISTOR DTC114ESA	
Q901	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q902	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q903	8-729-119-78	TRANSISTOR 2SC2785-HFE	

REF.NO.	PART NO.	DESCRIPTION			REMARK
		RESISTOR			
R401	1-249-383-11	CARBON	1.5	5%	1/4W F
R402	1-215-866-11	METAL OXIDE	330	5%	1W F
R403	1-214-796-00	METAL	1.5	1%	1/2W
R404	1-215-439-00	METAL	5.6K	1%	1/4W
R405	1-214-796-00	METAL	1.5	1%	1/2W
R406	1-216-677-11	METAL CHIP	12K	0.50%	1/10W
R407	1-249-421-11	CARBON	2.2K	5%	1/4W
R408	1-216-073-00	RES,CHIP	10K	5%	1/10W
R409	1-216-671-11	METAL CHIP	6.8K	0.50%	1/10W
R410	1-215-447-00	METAL	12K	1%	1/4W
R411	1-216-688-11	METAL CHIP	36K	0.50%	1/10W
R500	1-249-377-11	CARBON	0.47	5%	1/4W F
R501	1-247-807-31	CARBON	100	5%	1/4W
R502	1-218-758-11	METAL CHIP	180K	0.50%	1/10W
R503	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R504	1-249-377-11	CARBON	0.47	5%	1/4W F
R505	1-216-073-00	RES,CHIP	10K	5%	1/10W
R506	1-215-481-00	METAL	330K	1%	1/4W
R507	1-215-431-00	METAL	2.7K	1%	1/4W
R508	1-247-807-31	CARBON	100	5%	1/4W
R509	1-247-863-91	CARBON	22K	5%	1/4W
R510	1-216-081-00	RES,CHIP	22K	5%	1/10W
R511	1-249-381-11	CARBON	1	5%	1/4W F
R512	1-249-389-11	CARBON	4.7	5%	1/4W
R513	1-215-888-00	METAL OXIDE	220	5%	2W F
R514	1-216-081-00	RES,CHIP	22K	5%	1/10W
R515	1-249-417-11	CARBON	1K	5%	1/4W F
R516	9-910-999-31	METAL	150	1%	1/2W
R517	1-216-393-00	METAL OXIDE	2.2	5%	3W F
R518	1-216-393-00	METAL OXIDE	2.2	5%	3W F
R519	1-216-089-91	RES,CHIP	47K	5%	1/10W
R520	1-249-397-11	CARBON	22	5%	1/4W F
R521	1-249-417-11	CARBON	1K	5%	1/4W F
R522	1-249-401-11	CARBON	47	5%	1/4W
R523	1-216-089-91	RES,CHIP	47K	5%	1/10W
R524	1-216-089-91	RES,CHIP	47K	5%	1/10W
R525	1-249-417-11	CARBON	1K	5%	1/4W F
R526	1-249-425-11	CARBON	4.7K	5%	1/4W
R527	1-249-429-11	CARBON	10K	5%	1/4W
R528	1-247-863-91	CARBON	22K	5%	1/4W
R529	1-249-429-11	CARBON	10K	5%	1/4W F
R530	1-216-474-11	METAL OXIDE	82	5%	3W F
R531	1-216-474-11	METAL OXIDE	82	5%	3W F
R532	1-249-385-11	CARBON	2.2	5%	1/4W F
R533	1-249-417-11	CARBON	1K	5%	1/4W F
R534	1-249-405-11	CARBON	100	5%	1/4W F

Note: The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

Note: Les composants identifies per un trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

REF.NO.	PART NO.	DESCRIPTION			REMARK
R535	1-216-089-91	RES,CHIP	47K	5%	1/10W
R536	1-249-417-11	CARBON	1K	5%	1/4W F
R537	1-216-089-91	RES,CHIP	47K	5%	1/10W
R538	1-215-905-11	METAL OXIDE	10	5%	3W F
R539	1-215-905-11	METAL OXIDE	10	5%	3W F
R540	1-215-476-00	METAL	200K	1%	1/4W
R541	1-215-421-00	METAL	1K	1%	1/4W
R542	1-215-421-00	METAL	1K	1%	1/4W
R543	1-249-389-11	CARBON	4.7	5%	1/4W F
R544	1-215-493-00	METAL	1M	1%	1/4W
R545 ⚠	1-216-691-11	METAL CHIP	47K	0.50%	1/10W
R546 ⚠	1-215-457-00	METAL	33K	1%	1/4W
R547 ⚠	1-215-487-00	METAL	560K	1%	1/4W
R548 ⚠	1-216-657-11	METAL CHIP	1.8K	0.50%	1/10W
R549 ⚠	1-215-467-00	METAL	82K	1%	1/4W
R550 ⚠	1-215-427-00	METAL	1.8K	1%	1/4W
R551	1-215-453-00	METAL	22K	1%	1/4W
R552 ⚠	1-215-463-00	METAL	56K	1%	1/4W
R553	1-216-699-11	METAL CHIP	100K	0.50%	1/10W
R554	1-218-756-11	METAL CHIP	150K	0.50%	1/10W
R556	1-216-691-11	METAL CHIP	47K	0.50%	1/10W
R557	1-216-079-00	RES,CHIP	18K	5%	1/10W
R558	1-215-445-00	METAL	10K	1%	1/4W
R559	1-215-431-00	METAL	2.7K	1%	1/4W
R560	1-215-449-00	METAL	15K	1%	1/4W
R561	1-216-474-11	METAL OXIDE	82	5%	3W F
R562	1-215-447-00	METAL	12K	1%	1/4W
R563	1-249-383-11	CARBON	1.5	5%	1/4W F
R564	1-216-089-91	RES,CHIP	47K	5%	1/10W
R565	1-215-481-00	METAL	330K	1%	1/4W
R566	1-215-859-00	METAL OXIDE	22	5%	1W F
R567	1-216-073-00	RES,CHIP	10K	5%	1/10W
R568	1-249-437-11	CARBON	47K	5%	1/4W
R569	1-216-643-11	METAL CHIP	470	0.50%	1/10W
R570	1-249-417-11	CARBON	1K	5%	1/4W
R571	1-215-926-00	METAL OXIDE	33K	5%	3W F
R572	1-249-437-11	CARBON	47K	5%	1/4W
R573	1-247-887-00	CARBON	220K	5%	1/4W
R574	1-249-429-11	CARBON	10K	5%	1/4W
R575	1-260-314-11	CARBON	68	5%	1/2W
R576	1-249-437-11	CARBON	47K	5%	1/4W
R577	1-216-447-00	METAL OXIDE	27	5%	2W F
R578	1-216-447-00	METAL OXIDE	27	5%	2W F
R579	1-247-883-00	CARBON	150K	5%	1/4W
R580	1-216-077-00	RES,CHIP	15K	5%	1/10W
R581	1-249-429-11	CARBON	10K	5%	1/4W
R582	1-249-402-11	CARBON	56	5%	1/4W F
R583	1-216-073-00	RES,CHIP	10K	5%	1/10W
R584	1-216-065-91	RES,CHIP	4.7K	5%	1/10W

REF.NO.	PART NO.	DESCRIPTION			REMARK
R585	1-260-099-11	CARBON	1K	5%	1/2W
R586	1-260-103-11	CARBON	2.2K	5%	1/2W
R587	1-216-049-91	RES,CHIP	1K	5%	1/10W
R589	1-249-425-11	CARBON	4.7K	5%	1/4W
R590	1-215-453-00	METAL	22K	1%	1/4W
R591	9-910-999-31	METAL	150	1%	1/2W
R592	9-910-999-31	METAL	150	1%	1/2W
R593	1-215-423-00	METAL	1.2K	1%	1/4W
R600 ⚠	1-205-998-11	CEMENTED	1	5%	10W
R602	1-249-441-11	CARBON	100K	5%	1/4W
R603	1-249-403-11	CARBON	68	5%	1/4W
R604 ⚠	1-202-847-00	SOLID	560K	20%	1/2W
R605 ⚠	1-202-933-61	FUSIBLE	0.1	10%	1/2W F
R609	1-215-927-00	METAL OXIDE	47K	5%	3W F
R610	1-215-927-00	METAL OXIDE	47K	5%	3W F
R611	1-215-445-00	METAL	10K	1%	1/4W
R612	1-247-791-91	CARBON	22	5%	1/4W
R613	1-249-429-11	CARBON	10K	5%	1/4W
R614	1-216-381-11	METAL OXIDE	0.22	5%	3W F
R615	1-247-885-00	CARBON	180K	5%	1/4W
R617	1-249-417-11	CARBON	1K	5%	1/4W
R618	1-215-411-00	METAL	390	1%	1/4W
R619	1-249-421-11	CARBON	2.2K	5%	1/4W
R620	1-247-863-91	CARBON	22K	5%	1/4W
R621 ⚠	1-211-874-11	FUSIBLE	0.12	10%	1/2W
R622 ⚠	1-211-874-11	FUSIBLE	0.12	10%	1/2W
R623 ⚠	1-211-874-11	FUSIBLE	0.12	10%	1/2W
R624 ⚠	1-219-154-11	FUSIBLE	0.12	10%	1/4W
R625 ⚠	1-219-154-11	FUSIBLE	0.12	10%	1/4W
R626	1-215-405-00	METAL	220	1%	1/4W
R627	1-247-895-91	CARBON	470K	5%	1/4W
R628	1-215-479-00	METAL	270K	1%	1/4W
R630	1-215-437-00	METAL	4.7K	1%	1/4W
R631	1-215-405-00	METAL	220	1%	1/4W
R632	1-216-049-91	RES,CHIP	1K	5%	1/10W
R633	1-249-429-11	CARBON	10K	5%	1/4W
R634	1-249-431-11	CARBON	15K	5%	1/4W
R635	1-216-049-91	RES,CHIP	1K	5%	1/10W
R636	1-216-049-91	RES,CHIP	1K	5%	1/10W
R637	1-216-351-00	METAL OXIDE	1.5	5%	1W F
R638	1-215-435-00	METAL	3.9K	1%	1/4W
R639 ⚠	1-211-874-11	FUSIBLE	0.12	10%	1/2W
R641	1-249-429-11	CARBON	10K	5%	1/4W F
R642	1-260-127-11	CARBON	220K	5%	1/2W
R643	1-215-435-00	METAL	3.9K	1%	1/4W
R644	1-216-667-11	METAL CHIP	4.7K	0.50%	1/10W
R645	1-216-691-11	METAL CHIP	47K	0.50%	1/10W
R649 ⚠	1-218-642-11	METAL OXIDE	100K	5%	1W F
R703	1-260-092-11	CARBON	270	5%	1/2W

Note: The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

The components identified by ⧓ in this manual have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation. Should replacement be required, replace only with the value originally used.

REF.NO.	PART NO.	DESCRIPTION			REMARK
R704	1-215-445-00	METAL	10K	1%	1/4W
R705	1-249-425-11	CARBON	4.7K	5%	1/4W
R706	1-249-425-11	CARBON	4.7K	5%	1/4W
R707	1-249-429-11	CARBON	10K	5%	1/4W
R708	1-249-429-11	CARBON	10K	5%	1/4W
R709	1-249-429-11	CARBON	10K	5%	1/4W
R710	1-249-429-11	CARBON	10K	5%	1/4W
R711	1-216-346-00	METAL OXIDE	0.56	5%	1W F
R712	1-215-860-11	METAL OXIDE	33	5%	1W F
R713	1-216-347-11	METAL OXIDE	0.68	5%	1W F
R716	1-215-860-11	METAL OXIDE	33	5%	1W F
R717	1-216-353-00	METAL OXIDE	2.2	5%	1W F
R718	1-215-863-11	METAL OXIDE	100	5%	1W F
R719	1-249-431-11	CARBON	15K	5%	1/4W
R724	1-216-423-11	METAL OXIDE	27	5%	1W F
R727	1-249-431-11	CARBON	15K	5%	1/4W
R728	1-215-863-11	METAL OXIDE	100	5%	1W F
R729	1-216-353-00	METAL OXIDE	2.2	5%	1W F
R730	1-215-860-11	METAL OXIDE	33	5%	1W F
R903	1-249-417-11	CARBON	1K	5%	1/4W
R904	1-249-417-11	CARBON	1K	5%	1/4W
R906	1-216-073-00	RES,CHIP	10K	5%	1/10W
R907	1-260-087-11	CARBON	100	5%	1/2W
R908	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R909	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R910	1-249-411-11	CARBON	330	5%	1/4W
R911	1-249-413-11	CARBON	470	5%	1/4W
R912	1-249-417-11	CARBON	1K	5%	1/4W
R913	1-247-807-31	CARBON	100	5%	1/4W
R914	1-247-807-31	CARBON	100	5%	1/4W
R915	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R916	1-216-077-00	RES,CHIP	15K	5%	1/10W
R917	1-216-077-00	RES,CHIP	15K	5%	1/10W
R918	1-249-417-11	CARBON	1K	5%	1/4W
R919	1-249-417-11	CARBON	1K	5%	1/4W
R920	1-216-049-91	RES,CHIP	1K	5%	1/10W
R922	1-216-073-00	RES,CHIP	10K	5%	1/10W
R925	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R927	1-216-295-91	SHORT			
R929	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R931	1-216-659-11	METAL CHIP	2.2K	0.50%	1/10W
R933	1-249-419-11	CARBON	1.5K	5%	1/4W
R934	1-249-429-11	CARBON	10K	5%	1/4W
R935	1-247-807-31	CARBON	100	5%	1/4W
R936	1-247-807-31	CARBON	100	5%	1/4W
R937	1-249-417-11	CARBON	1K	5%	1/4W
R938	1-247-807-31	CARBON	100	5%	1/4W
R940	1-215-431-00	METAL	2.7K	1%	1/4W

REF.NO.	PART NO.	DESCRIPTION			REMARK
R941	1-216-643-11	METAL CHIP	470	0.50%	1/10W
R942	1-215-413-00	METAL	470	1%	1/4W
R943	1-216-647-11	METAL CHIP	680	0.50%	1/10W
R944	1-216-651-11	METAL CHIP	1K	0.50%	1/10W
R945	1-215-425-00	METAL	1.5K	1%	1/4W
R946	1-215-431-00	METAL	2.7K	1%	1/4W
R947	1-216-671-11	METAL CHIP	6.8K	0.50%	1/10W
R949	1-216-295-91	SHORT			
R951	1-216-025-91	RES,CHIP	100	5%	1/10W
R953	1-216-073-00	RES,CHIP	10K	5%	1/10W
R954	1-216-073-00	RES,CHIP	10K	5%	1/10W
R957	1-216-017-91	RES,CHIP	47	5%	1/10W
R958	1-216-017-91	RES,CHIP	47	5%	1/10W
R959	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R961	1-216-025-91	RES,CHIP	100	5%	1/10W

VARIABLE RESISTOR

⧓ RV501 ⚠	1-241-767-21	RES, ADJ, CERMET 100K	
	3-710-578-01	COVER, VOLUME, 6 MOLD	
RV601	1-223-480-11	RES, ADJ, CERMET 5K	

RELAY

RY500	1-755-137-11	RELAY
RY601 ⚠	1-755-031-11	RELAY

SWITCH

S601 ⚠	1-571-433-21	SWITCH, PUSH (AC POWER)
S901	1-692-431-21	SWITCH, TACTILE
S902	1-762-816-11	SWITCH, TACTILE
S903	1-692-431-21	SWITCH, TACTILE
S904	1-692-431-21	SWITCH, TACTILE
S905	1-692-431-21	SWITCH, TACTILE
S906	1-692-431-21	SWITCH, TACTILE
S909	1-692-431-21	SWITCH, TACTILE

SPARK GAP

SG501 ⚠	1-519-422-11	GAP, SPARK

TRANSFORMER

T501 ⚠	1-453-241-11	TRANSFORMER ASSY, FLYBACK (NX-4400//X4L4)
T503	1-429-109-11	TRANSFORMER, FERRITE (DFT)
T504 ⚠	1-429-103-11	TRANSFORMER, FERRITE (HDT)
T505	1-429-211-11	TRANSFORMER, FERRITE (HST)
T601 ⚠	1-431-534-11	TRANSFORMER, CONVERTER (SRT)

Note: The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

Note: Les composants identifies per un trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

REF.NO.	PART NO.	DESCRIPTION	REMARK
		THERMISTOR	
TH501	1-807-796-11	THERMISTOR	
TH502	1-807-796-11	THERMISTOR	
TH600 ⚠	1-809-827-11	THERMISTOR	
TH601 ⚠	1-809-827-11	THERMISTOR, POSITIVE	
		VARISTOR	
VA600 ⚠	1-810-622-11	VARISTOR	
VA601 ⚠	1-810-271-21	VARISTOR ZNR-14DK471U	
		CRYSTAL	
X901	1-767-641-11	VIBRATOR, CRYSTAL	
X902	1-767-933-11	OSCILLATOR, CERAMIC	
		MISCELLANEOUS	
⚠	8-738-723-80	ITC ASSY, 17FRFM-R3 (EQ)	
⚠	8-738-733-82	ITC ASSY, 17FRFM-R3 (J)	
⚠	8-738-733-83	ITC ASSY, 17FRFM-R3 (NH)	
⚠	8-738-733-05	CRT, 17FRFM (M41LKN15X) (NH)	
⚠	8-738-734-05	CRT, 17FRFM (M41LKN15X) (J)	
⚠	8-738-735-05	CRT, 17FRFM (M41LKN15X) (EQ)	
⚠	1-452-912-11	NECK ASSY (NA-2914)	
⚠	8-451-490-11	DY Y17FRJ3-M	
	1-500-386-11	FILTER CLAMP (FERRITE CORE)	
⚠	1-416-282-21	COIL, DEMAGNETIZATION	
⚠	1-453-241-11	TRANSFORMER ASSY, FLYBACK (NX-4400//X4L4)	
*	1-782-837-11	CABLE ASSY VIDEO (15P D-SUB)	
	3-861-661-21	MANUAL, INSTRUCTION	
⚠	1-575-181-11	CORD SET, POWER (J)	

English
98AJ74023-1
Printed in U.S.A.
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9-978-836-01